RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND FIRM PERFORMANCE: AN AFRICAN PERSPECTIVE

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DECLARATION

I, the undersigned, hereby declare that the work contained in this dissertation is my own original work and that I have not previously in its entirety or in part submitted it at any University for a degree.

Signature: Date: November, 2007

ABSTRACT

Corporate Governance has engaged the attention of academics and practitioners alike for some time now. It is sad to note, however, that most of the studies carried out in this area have been conducted in countries such as the USA and the UK. In recent times, interest in Corporate Governance on the African continent has assumed heightened proportions, probably as a result of the 1997 East Asian crisis and the relatively poor performance of Corporate Africa. Melvin Ayogu who researched into governance matters around the continent pointed out that corporate governance perhaps is nothing but a mirror image of political governance bridled with a lot of corruption. In spite of the recognition that corporate governance is critical for firm performance and for sustained macroeconomic growth coupled with the heightened interest in the area, research in corporate governance has not received the needed attention on the continent. This was the main motivation for the study. In carrying out this study we considered 103 listed companies drawn from Ghana, Nigeria, Kenya and South Africa and 52 Microfinance Institutions from Ghana. Data consisted primarily of governance and financial variables. Though, most of the financial data was obtnaied through secondary sources, the governance data was essentially obtianed through questionnaire administration. Analysis of the data was done primarily within the Panel Data Framework and various shades of panel data estimations were run.

This dissertation presents the results of the research work underlying seven stand-alone but related essays that focus on the relationship between corporate governance and various aspects of firm behaviour. Whilst, five of the essays dwell on corporate governance and firm attributes, one considers determinants of board size and composition by using data from Ghana and the last essay explores how corporate governance and stock market development affect economic growth. The first essay looks at corporate governance and firm performance and the second focusses on the determinants of board size and composition. The third essay concentrates on corporate governance and shareholder value maximisation. The fourth essay considers how corporate governance affects the financing choices of firms. The link between firms' investment opportunity set and corporate governance is the subject matter of the fifth essay. While, the sixth looks at how corporate board diversity through gender affect the performance of microfinance institutions in Ghana, the last and seventh essay is devoted to an exploration of the linkage between corporate governance, stock market development and economic growth using board independence as the main governance indicator.

The findings of the study indicate that large and independent boards enhance firm value and that when a CEO serves as board chair, it has negative effect on performance and such firms employ less debt. We also found that a CEO's tenure in office enhances firms' profitability while board activity intensity has a negative effect on firm profitability. The study also revealed that while larger boards employ more debts, the independence of a board has a significant negative relationship with short-term debt. The size of audit committees and the frequency of their meetings have a positive influence on market-based performance measures and institutional shareholding essentially sends a positive signal to potential investors thereby enhancing market valuation of firms. The study also confirmed the widely-held view that board size and its composition are functions of firm and industrial characteristics. Thus, while firm level risk has a positive relationship with board size, CEO tenure correlates negatively with board size and that firms with larger institutional shareholding employ fewer outside directors. Firms in the finance sector were seen to

employ smaller board sizes and fewer outside directors partly due to the existence of other regulatory mechanisms in these institutions. More so, it was found that large board sizes enhance shareholders wealth and that both sector and country specific effects impact on shareholders value. The mining sector was seen as dominant in maximising shareholder value in terms of dividend yield. The study once again showed that shareholder value maximisation is also dependent on the level of country specific risk. Our results also point to the fact that firms with investment or growth opportunities employ large boards (high board and auditor fees), have longer CEO tenure and are profitable, and that the extent of growth response to governance structures is influenced by both country and sector specific effects. Findings again, suggest that board diversity through the inclusion of women is important for enhanced performance of microfinance institutions and the independence of corporate boards in particular is important for firm performance. These findings have important policy implications.

OPSOMMING

Vir 'n geruime tyd reeds neem korporatiewe bestuur-en-beheer in gelyke mate die aandag in beslag van akademici en praktisyne. Dit is egter jammer om te sê dat die meeste studies wat uitgevoer is in hierdie veld, gedoen is in lande soos die VSA en die VK. Onlangs het belangstelling in korporatiewe bestuur-en-beheer in Afrika egter toegeneem, waarskynlik as gevolg van die Oos-Asië krisis in 1997 en die relatiewe swak prestasie van Korporatiewe Afrika. Melvin Ayogu, wat navorsing gedoen het oor bestuur-en-beheerkwessies regoor die kontinent, het uitgewys dat korporatiewe bestuur-en-beheer dalk niks anders is as 'n spieëlbeeld van politieke bestuur-en-beheer, wat aan bande gelê word deur baie korrupsie. Ten spyte van die besef dat korporatiewe bestuur-en-beheer 'n kritiese faktor is vir maatskappye se prestasie en vir volhoubare makro-ekonomiese groei, gekoppel aan 'n verhoogde belangstelling in die veld, word die nodige aandag nie gegee aan navorsing oor korporatiewe bestuur-en-beheer op die kontinent nie. Dit was die belangrikste motivering vir hierdie studie. In die uitvoer van hierdie studie het ons gefokus op 103 genoteerde maatskappye gekies uit Ghana, Nigerië, Kenia en Suid-Afrika en op 52 mikrofinansieringsinstellings uit Ghana. Data het bestaan in die eerste plek uit bestuur-en-beheer- en finansiële veranderlikes. Alhoewel die meeste finansiële data verkry is uit sekondêre bronne, is die bestuur-en-beheerdata in wese verkry deur vraelysadministrasie. Die analise van die data is gedoen hoofsaaklik binne die Paneeldataraamwerk en verskeie nuanses van paneeldataberamings is gedoen.

Hierdie proefskrif toon die resultate van die navorsingswerk onderliggend aan sewe alleenstaande maar verbandhoudende verhandelings wat fokus op die verhouding tussen korporatiewe bestuur-en-beheer en verskeie aspekte van maatskappygedrag. Hoewel vyf van die verhandelings toegespits is op korporatiewe bestuur-en-beheer en maatskappy-eienskappe, gee een oorweging aan determinante van raadgrootte en -samestelling deur gebruik te maak van data uit Ghana en die laaste verhandeling verken die invloed van korporatiewe bestuur-en-beheer en aandelemarkontwikkeling op ekonomiese groei. Die eerste verhandeling kyk na korporatiewe bestuur-en-beheer en maatskappye se prestasie, en die tweede een fokus op determinante van raadgrootte en samestelling. Die derde verhandeling konsentreer op korporatiewe bestuur-en-beheer en die maksimering van aandeelhouerwelvaart. Die vierde verhandeling oorweeg hoe korporatiewe bestuur-en-beheer die finansieringskeuses van maatskappye beïnvloed. Die verband tussen maatskappye se beleggingsgeleenthede en korporatiewe bestuur-en-beheer is die onderwerp van die vyfde verhandeling. Terwyl die sesde verhandeling kyk hoe diversiteit in korporatiewe rade op grond van gender die prestasie van mikrofinansieringsinstellings in Ghana beïnvloed, is die sewende en laaste verhandeling gefokus op 'n ondersoek na die skakeling tussen korporatiewe bestuur-en-beheer, aandelemarkontwikkeling en ekonomiese groei, met raadonafhanklikheid as die hoof- bestuur-en-beheeraanwyser.

Die bevindinge van die studie dui daarop dat groot en onafhanklike rade maatskappye se waarde verbeter en wanneer 'n hoof- uitvoerende beampte dien as raadsvoorsitter, dit 'n negatiewe uitwerking het op prestasie en sodanige maatskappye maak gebruik van minder skuld. Ons het ook gevind dat 'n hoof- uitvoerende beampte se ampstermyn 'n maatskappy se winsgewendheid verbeter terwyl intensiteit van raadaktiwiteit 'n negatiewe impak het op 'n maatskappy se winsgewendheid. Verder het die studie onthul dat al maak groter rade gebruik van meer skuld, die onafhanklikheid van 'n raad in 'n beduidende negatiewe verhouding

staan tot korttermynskuld. Die grootte van ouditkomitees en die gereeldheid van hulle vergaderings het 'n positiewe invloed op markgebaseerde prestasiemaatstawwe en institusionele aandeelhouding stuur in wese 'n positiewe sein aan potensiële beleggers waardeur die markwaardasie van maatskappye verbeter word. Die studie het ook die algemeen aanvaarde siening bevestig dat raadgrootte en -samestelling funksies is van maatskappy- en industriële eienskappe. Dus, al staan risiko op maatskappyvlak in 'n positiewe verhouding met raadgrootte, korreleer die ampstermyn van 'n hoof- uitvoerende beampte negatief met raadgrootte en dat maatskappye met groter institusionele aandeelhouding gebruik maak van minder eksterne direkteure. Maatskappye in die finansiële sektor het geblyk om van kleiner rade en minder eksterne direkteure gebruik te maak, gedeeltelik oor die bestaan van ander regulerende meganismes in hierdie instellings. Nog meer, dit is gevind dat groot raadgroottes aandeelhouers se welvaart verbeter en dat beide sektor- en landspesifieke effekte 'n impak het op aandeelhouerwelvaart. Die mynbousektor is gesien as oorheersend in die maksimering van aandeelhouerwelvaart in terme van aandeelopbrengs. Die studie het weereens gewys dat die maksimering van aandeelhouerwelvaart ook afhanklik is van die vlak van landspesifieke risiko's. Ons resultate het verder gewys daarop dat maatskappye met beleggings- of groeigeleenthede van groter rade (hoë raad- en ouditeursfooie) gebruik maak, langer ampstermyne vir hoof- uitvoerende beamptes het en winsgewend is, en dat die omvang van groeireaksie op bestuur-en-beheer beïnvloed word deur beide land- en sektorspesifieke effekte. Bevindinge dui weereens daarop dat diversiteit in rade deur die insluiting van vroue belangrik is vir die verbeterde prestasie van mikrofinansieringsinstellings en dat veral die onafhanklikheid van korporatiewe rade belangrik is vir maatskappyprestasie. Hierdie bevindinge hou belangrike beleidsimplikasies in.

DEDICATION

This work is dedicated to my wife, Mary Amoakoh-Coleman, and our two wonderful children, Kobina and Ewura Esi Kyereboah-Coleman, for their encouragement and support and for bearing with me during the many months that I was absent from home.

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CHAPTER ONE

1.   INTRODUCTION AND BACKGROUND

1.1   Background and Statement of Research Problem

Corporate governance is an emerging and exciting issue especially on the African continent. It became the focus of attention especially after the recent corporate scandals in the US and elsewhere. How should firms be governed and managed in the interest of shareholders? The term "corporate governance" has dominated policy agenda in developed market economies for over a decade especially in relation to large firms. Consequently, the concept is gradually warming itself to the pinnacle of policy agenda on the African continent. Indeed, the East Asian crisis and the relatively poor performance of the corporate sector in Africa seem to have served as the main historical antecedents necessitating the incorporation of corporate governance in the development debate (Berglof & von Thadden, 1999). It is believed that good governance generates investor goodwill and confidence and a number of recent studies have shown that good corporate governance increases valuations and boosts the bottom line. For instance, a study by Gompers *et al.* (2003) concluded that companies with strong shareholder rights yielded annual returns that were 8.5 percent greater than those with weak rights and also more democratic firms are seen to enjoy higher valuations, higher profits, higher sales growth, and lower capital expenditures. Poorly governed firms are thus, expected to be less profitable, have greater bankruptcy risk, lower valuations and pay out less to their shareholders, while well-governed firms are expected to have higher profits, be less at risk of bankruptcy, have higher valuations and pay out more cash to their shareholders. Claessens *et al.* (2003) posits that better corporate frameworks benefit firms through greater

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access to financing, lower cost of capital, better performance and more favourable treatment of all stakeholders. It has been argued that weak corporate governance does not only lead to poor firm performance and risky financing patterns, but is also conducive for macroeconomic crises like the 1997 East Asia crisis. Other researchers contend that good corporate governance is important for increasing investor confidence and market liquidity (Donaldson, 2003). The separation of ownership and control in a modern firm which creates agency problems because managers (agents) pursue a set of objectives different from the objectives of the owners (principals) is one of the fundamental rationales for corporate governance. In this instance, corporate governance is a mechanism that is intended to reduce the costs associated with the principal-agent paradigm.

The concept "corporate governance" has attracted various definitions. Metrick and Ishii (2002) define corporate governance from the perspective of the investor as "both the promise to repay a fair return on capital invested and the commitment to operate a firm efficiently given investment" suggesting that corporate governance has an impact on a firm's ability to access capital markets. Metrick and Ishii argue that firm-level governance may be more important in developing markets with weaker institutions as it helps to distinguish among firms. The Cadbury Committee (1992) defines corporate governance as "the system by which companies are directed and controlled". Zingales (1995) also defines a governance system as "the complex set of constraints that shape the ex-post bargaining over the quasi rent registered by the firm".

According to Mayer (1997), corporate governance is concerned with ways of bringing the interests of investors and managers in line and ensuring that firms are run for the benefit of

investors. Corporate governance is indeed concerned with the relationship between the internal governance mechanisms of corporations and society's conception of the scope of corporate accountability (Deakin & Hughes, 1997). It has been defined by Keasey *et al.* (1997) to include 'the structures, processes, cultures and systems that engender the successful operation of organisations. Corporate governance is also seen as the whole set of measures taken within the social entity that is an enterprise to favour the economic agents to take part in the productive process in order to generate some organisational surplus, and to set up a fair distribution between the partners, taking into consideration what they have brought to the organisation (Maati, 1999).

From these definitions, it may be stated more generally that corporate governance embodies what are considered to be legitimate lines of accountability by defining the nature of the relationship between the company and key corporate stakeholders. In other words, corporate governance comprises the systems, structures and processes that a firm puts in place to ensure a clear line of accountability in the day-to-day running of the firm basically as a mechanism to reduce agency problems and costs.

Becht *et al.* (2002) identify a number of reasons for the growing importance of corporate governance including the world-wide wave of privatisation of the past two decades, the pension fund reform and the growth of private savings, the takeover wave of the 1980s, the 1980s deregulation and integration of capital markets, the 1997 East Asia Crisis, and the series of recent corporate scandals. Studies in corporate governance have mainly been carried out in the developed economies mostly the USA and UK. Developing countries and

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especially those in Africa are now increasingly embracing the concept knowing that it leads to sustainable growth.

1.2   Research Problem

In spite of the renewed enthusiasm concerning issues of corporate governance in Africa, relevant empirical studies are still few and far between.[1]. This has invariably led to limitations in the depth of our understanding of corporate governance issues and a comparison of the continent's experiences with other continents. In Africa, one of the reference point studies in corporate governance was conducted by Ayogu (2001). In this study, Ayogu looked at regulatory and governance mechanisms in some selected African countries. However, studies linking corporate governance to firm-specific attributes cross-country wise are virtually non-existent on the continent. That is the vacuum the current study seeks to address. This study aims at linking corporate governance to firm specific attributes including performance in a cross-country investigation to aid our understanding of corporate governance issues on the continent.

In more general terms, it is possible to identify three levels of determinants of firm performance. The first relates to external market factors that are beyond the firm's control and generally occur economy-wide. The second set of factors are those that are internal and firm specific factors under the direct control of the firm. These factors include managerial efficiency, governance structure, ownership structure, managerial characteristics, etc., and

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[1] Only a handful of countries in Africa, namely South Africa, Ghana, Uganda, Kenya and Nigeria, have had studies on governance structures.

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they do affect a firm's ability to cope with the external factors. Finally, there are other factors such as size, leverage and the nature of the industry that affect a firm's performance.

Studies in corporate governance on the African continent, which are scanty, have tended to concentrate on some aspects of corporate governance and structure only, neglecting a deeper analysis of the causal relationships among corporate governance indicators and company performance. Studies have indeed shown that governance structures and indicators matter for corporate performance. The present study will provide empirical evidence on corporate governance and firm performance from the African perspective. It represents yet another platform to a better understanding of corporate governance and corporate performance in Africa. In attempting to address the problem that has been stated, the following research objectives will be pursued.

1.3   Research Objectives

The broad research objective of the study is to provide an empirical assessment of the effect of corporate governance on corporate performance on the African continent. The specific objectives are as follows:

a) To examine the relationship between corporate governance and firm performance in selected African countries;

b) To examine the determinants of corporate board size and its composition

c) To examine the link between corporate governance and shareholder value maximisation;

d) To examine how corporate governance affects the financing choices of firms;

e) To examine how corporate governance affects investment opportunities of firms

f) To examine how gender as a proxy for corporate board diversity affects performance; and

g) To explore the linkage between corporate governance, stock market developments and economic growth.

Data for the study was primarily obtained from the financials of the firms together with a questionnaire that solicited for some of the governance variables which were not in the annual reports. The questionnaire was sent out to about three hundred firms across the four countries that were used in the study. Reminders were sent a number of occasions as a follow up on the questionnaire. After about three months, we received 165 completed questionnaire back. However upon careful scrutiny for accuracy and completeness, one hundred and thirty-three of the returned questionnaire (representing 44.33% response rate) were found to be valid for the study. The response rate is appropriate for a study of this nature.

1.4   Significance of the Study

Issues regarding governance have received increased attention in recent times on the continent, more so as it is highlighted by the New Partnership for Africa's Development

Agenda.[2] An understanding of the pattern of corporate governance in the African corporate sector will provide an invaluable insight to top policy makers and assist in the on-going restructuring of corporate Africa.

Within the context of the current dynamic economic environment, the African corporate sector must face up to the challenges of globalisation in which the inability of firms to adapt to modern business culture may necessarily interfere with their ability to survive. It is imperative therefore for the African corporate sector to identify the best corporate practices in other parts of the world and to identify how these could be integrated into African business culture to enhance performance.

In spite of the importance of corporate governance, very little study has been undertaken in this area on the continent and a cross country study is yet to come. It is therefore hoped that the current study will fill this gap in our knowledge by providing robust value to the existing useful, though scanty studies on this subject in Africa. It is hoped that findings of the study will be very useful to policy makers, investors, researchers, corporate managers and other stakeholders involved in an effort to reshape corporate Africa.

1.5   Limitations of the Study

The study focussed on firms quoted on a number of regional stock exchanges in Africa. These stock exchanges were chosen out of convenience and with due regard to data accessibility and availability. We were also mindful of the fact that the underlying behaviour of these stock markets (bullish or bearish) could have effect on especially the performance

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[2] http://www.uneca.org/eca_resources/Conference_Reports_and_Other_Documents/nepad/NEPAD

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variables which could skew regression results. However, it is hoped that most of these effects were catered for by the use of control variables in the analysis. Listed companies were mostly used because of data reliability as these companies are required by law to publish annual reports and accounts. It is natural to expect a study of this nature on an emerging issue such as corporate governance that the issue of sample size could pose a problem. It would have been ideal to have a large sample but institutions were not forthcoming with the required primary data especially concerning the governance variables because most of the governance data were obtained through questionnaire survey. This also hindered our selection of what constituted the governance variables in the subsequent essays. This is a tacit admission of the fact that corporate governance embraces a broader set of variables.

For instance, both the King Report and the Cadbury Committee Report highlight seven key dimensions of good corporate governance summarised broadly as

- Board of Directors
- Audit Committee
- Executive and Director Compensation
- Insider Ownership Issues
- Director Characteristics
- Issues surrounding Charter/By-Laws, and
- Progressive Practices

Issues raised under Board of Directors could be summarised as board size, composition, CEO tenure, CEO duality, process of election of board members, committees within the

board and their composition, role of former CEOs, the mode of changing board size, CEOs and/or board members serving on other boards and how it is controlled, and whether there is a governance committee and how frequent does it meet.

With regards to audit committee, emphasis is on whether such committees exist, how it is composed, policy on auditor rotation, and whether shareholders are involved in the ratification of auditors.

Under executive and director compensation, matters concerning independence of compensation committees, shareholders participation in compensation issues, who qualifies to participate in firm's pension fund, and mode and method of CEO compensation are raised.

With regards to Insider ownership, issues of concern revolve around directors' ownership of stock and mode of qualification, percentage of insider ownership, and guidelines for executives and directors ownership of shares are highlighted.

Level of education, competencies and background experience are some of the issues that are raised under director characteristics.

Under corporate charter/by-laws, matters surrounding process and mode of approval of mergers, the right of shareholders to call for special meetings, and the mode and process of amendment of company's charter/by-laws are discussed.

With regards to progressive practices, issues such as timeliness of information dissemination, quality leadership, quality and flow of information between board and management and between board, management and employees and between board and employees, quality of reporting, review of board performance, the existence of board-approved succession plan, director tenure limits, the existence of advisory body to the board, the number of board meetings per year, etc are also deemed as critical for effective corporate governance.

Indeed, indicators and variables of corporate governance could be limitless as the list is highly in-exhaustive. In this breadth therefore, it is imperative to indicate that data availability, accessibility and measurability influenced our choice of variables in this study with due regards to the difficulty of modelling such variables. This stems from the fact that most of these governance variables have substantial measurement errors and therefore pose a danger in modelling which inevitably has implications for reliable results and interpretation thereof. Gathering most of these variables was made the more difficult because firms just failed to respond to the questionnaire submitted.

Though, the study assumes that the efficient performance of firms hinges on corporate governance as mentioned above, it does not explicitly rule out the fact that some other variables (such as political stability, bribery and corruption, undue bureaucracy, etc.) could be critical for firm performance. However, the study of corporate governance is especially important because it is expected a well structured corporate governance mechanisms could have a reduction effect on corruption, undue bureaucracy, bribery etc as result of increased transparency and accountability.

It must also be indicated that, the above limitations highlighted do not compromise the validity of the conclusions that are based on the findings of the study.

1.6   Organisation of the Study

The study is a collection of seven independent but related essays. This is because each of the seven papers discusses some aspects of corporate governance. Hence, the central theme of the essays is corporate governance. While Chapter one deals with the general introduction, problem statement, objectives, significance and limitations of the study, the first essay, "Corporate governance and firm performance: a dynamic panel data analysis", follows in Chapter two. Chapter three looks at what determines board size and its composition by using data from listed firms in Ghana. Chapter three is not a cross country study because the banking sector is included in this chapter for comparative analysis. In addition to the exclusion of the Banking sector in our cross-country data set, this specific data has a different end point as well covering 1998-2003. This formed the usable data for Ghana this paper.. Since, listed banks in Ghana are few it was our opinion that using that small sample in the large data-set could lead to skewed results.

In Chapter four, we look at how corporate governance affects shareholder value maximisation. The fundamental argument raised in this essay is that firms that perform well may not necessarily improve shareholders' value. In this chapter, a comparative analysis of shareholders' value maximisation in different sectors and countries is carried out. Chapter five is devoted to understanding how corporate governance influences a firm's financing

choice of debt or equity. Data from Kenya is used for this essay. This chapter is yet another specific country study which was based essentially on the fact that the data set had an entirely different end point. Data for the cross-country study was from 1997-2001 but this study used data from 1999-2003. We build on Chapter five and look at how corporate governance affects growth or investment opportunities of firms in chapter six.

In Chapter seven we use a unique data set on microfinance institutions and look at how board diversity with emphasis on women affects performance of these institutions. The specific country study in chapter seven is quite understandable since microfinance institutions have different characteristics as compared to the other firms. It is the last of out specific country study. We then make an attempt to explore how corporate governance and stock market developments affect economic growth in chapter eight. The study is summarised, conclusions drawn and policy recommendations offered in chapter nine. Suggestions for future research are also included in chapter nine. Due to the nature of the thesis, every chapter which is a stand alone essay has its own conclusion and policy recommendations. Thus, the conclusion and policy recommendations offered in chapter nine is essentially a summary of some of the major highlights of the various conclusions and recommendations from the individual essays.

Thus, apart from chapters three (3), five (5) and seven (7), the rest of the papers in carried out from a cross-country perspective.

Though, three out of the seven papers are country specific studies, it is our candid opinion that results, findings and conclusions emanating from these essays are not compromised or undermined because of this limitation and therefore could be generalised.

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CHAPTER TWO

2   CORPORATE GOVERNANCE AND FIRM PERFORMANCE IN AFRICA:

A DYNAMIC PANEL DATA ANALYSIS[∞]

*"The directors of such companies, however, being the managers rather of people's money than of their own, it cannot well
be expected that they should watch over it with the same anxious vigilance with which the partners in a private copartnery
frequently watch over their own…" (Adam Smith, 1776)*

2.1   Introduction

Effective governance is critical to all economic transactions especially in emerging and
transition economies (Dharwardkar *et al.*, 2000). It is argued that in an economy, public
savings are channelled into investment through a multi-layer agency as separation of
ownership and control of capital functions pervasively through banks, pension funds,
insurance companies and stock markets and in some cases, through government receipt of
taxes. Thus, the market's institutional conditions that reduce informational asymmetries and
facilitate effective monitoring of agents impinges on the efficiency of investment at varying
levels of agency interactions. Corporate governance, in the same breadth, has assumed centre
stage for enhanced corporate performance. Corporate governance has been defined as "ways

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[∞] Three Papers based on this Chapter have been published. They are:

1. The Relationship Between Board Size, Board Composition, CEO Duality and Firm Performance:
Experience from Ghana, Corporate Ownership and Control Journal, Vol. 4(2), pp.114-122;

2. The Link between corporate governance and performance of the non-traditional export sector, Corporate
Governance, Vol. 6(5), pp.609-623.

3. Bo Boards and CEOs Matter for Bank Performance? A Comparative Analysis of Banks in Ghana. Corporate
Ownership and Control, Vol. 4(1), 119-126

Two Papers based on this chapter were also presented at the Biennial Conference of the Economic Society of
South Africa, Durban, September 2005.

of bringing the interests of investors and managers in line and ensuring that firms are run for the benefit of investors (Mayer, 1997). Indeed, it is concerned with the relationship between the internal governance mechanisms of corporations and society's conception of the scope of corporate accountability (Deakin & Hughes, 1997) and has also been defined by Keasey *et al.* (1997) to include 'the structures, processes, cultures and systems that engender the successful operation of organisations'. From this we would want to state that corporate governance comprises the structures and processes laid down by a corporate entity to minimise the scope of agency problems that result from separation between ownership and control. We must however, indicate that different systems of corporate governance will embody what are considered to be legitimate lines of accountability by defining the nature of the relationship between the company and key corporate constituencies.

The East Asian crisis and the recent corporate scandals around the world coupled with the seemingly poor performance of corporate Africa have given prominence and impetus to corporate governance on the continent. The extant literature on corporate governance which is generally about large and listed firms in the US and UK considers the relationship between corporate ownership structure, the composition of boards of directors and corporate performance. One of the comprehensive studies done on the continent with regard to corporate governance is by Ayogu (2001). The focus of Ayogu (2001) was on regulations, legalities and governance practices across selected African countries. Thus, the point must be made that linking corporate governance and firm performance in a cross-country study on the continent is yet to emerge. This is our primary motivation for carrying out this study. It must also be indicated that South Africa has the most well-structured governance mechanism among the selected countries. On the African continent and in our sample

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countries, corporate governance is driven by the Companies Code, Securities and Exchange Commission, the Stock Exchange listing requirements, regulations and rules and other country specific regulatory agencies. Even though, corporate governance in Africa has taken off on a good note, there is still insufficient relevant empirical research, which limits the basis for comparison of the continent's corporate governance experiences and outcomes with other continents.

In this paper, therefore, we attempt to determine how corporate governance influences corporate performance in a cross-country investigation. The hope is that findings will enable us appreciate the role of governance in firm performance. The rest of the paper is organised as follows: section two discusses relevant literature; section three looks at data and methodological issues; section four is devoted to the discussion of empirical findings; and section five concludes and highlights policy implications.

2.2   Literature Review

The existence of divergent and sometimes conflicting objectives among corporate managers and shareholders has given rise to the design of many concepts and mechanisms to ensure that the cost associated with such divergent interests is minimal. One of the arrangements proposed to deal with this is corporate governance. It has been argued that the agency theory has been the most dominant issue in corporate governance. However, several other theories have emerged, all in an attempt to highlight the objective of a firm and how the firm

should be responsible in meeting its obligations. In the following, these theories are discussed.

2.2.1   Agency Theory

It is an acknowledged fact that the principal-agent theory is generally considered as the starting point for any debate on the issue of corporate governance emanating from *"The Modern Corporation and Private Property",* the classical thesis by Berle and Means (1932). In this thesis, there is a profound description of a fundamental agency problem in modern firms due primarily to the separation between financing sources and management. Modern firms suffer from a separation of ownership and control and are therefore run by professional managers (agents) who are not accountable to dispersed shareholders. This view fits into the principal-agent paradigm. In this regard, the fundamental question is how to ensure that managers follow the interests of shareholders in order to reduce cost associated with principal-agent contract. The principals in this wise are confronted with two main problems. Apart from facing an adverse selection problem in that they are faced with selecting the most capable managers, they are also confronted with a moral hazard problem because they must give the agents (managers) the right incentives to put forth the appropriate effort and make decisions aligned with shareholder interests.

In a further definition of agency relationship and cost, Jensen and Meckling (1976) describe agency relationship as a contract under which "*one or more persons (principal) engage another person (agent) to perform some service on their behalf, which involves delegating some decision-making authority to*

the agent". In this scenario, there exists a conflict of interests between managers or controlling shareholders and bondholders and outside or minority shareholders leading to the tendency that the former may extract "*perquisites*" (or perks) out of a firm's resources and be less interested to pursue new profitable ventures. Agency costs include monitoring expenditures by the principal, such as auditing, budgeting, control and compensation systems; bonding expenditures by the agent; and residual loss due to divergence of interests between the principal and the agent. The share and the bond price that shareholders and bondholders respectively (as principal) pay reflect such agency costs. To increase firm value, one must therefore reduce agency costs. The following represents a summary of the proposition aimed at overcoming opportunistic behaviour of managers within the agency theory:

- *Composition of board of directors*: The board of directors is expected to be made up of more non-executive directors for effective control. The reason behind this relies on the argument that it reduces the conflict of interest and ensures a board's independence in monitoring and passing a fair and unbiased judgement on management;

- *CEO duality*: It is expected that different individuals occupy the positions of CEO and board chairperson as this corrects the concentration of power in one individual and thus greatly reduces undue influencing of management and board members.

2.2.2   Stakeholder Theory

One argument against the strict agency theory is its narrowness, hence the need to explore. The stakeholder theory stipulates that a multipurpose corporate entity invariably seeks to provide a balance between the interests of its diverse stakeholders in order to ensure that each interest constituency receives some degree of satisfaction (Abrams, 1951). The stakeholder theory is managerial because its shows and directs how managers operate rather than primarily addressing management theories and economists. The basic question that stakeholder theory seeks to address concerns the purpose of the firm. Identification of the firm's purpose therefore becomes the driving force underlying its activities (Freeman *et al.* 2004). Stakeholder theory consequently highlights the responsibility of the firm to its various stakeholders and thus pushes management to design and employ appropriate methodologies to determine the nature of the relationship between the management and the interested parties in order to deliver on their purpose. There is a realisation that economic value is created by people who voluntarily come together and cooperate to improve everyone's circumstances (Freeman *et al.,* 2004).

Stakeholder theory has become more prominent because many researchers have recognised that the activities of a corporate entity impact on the external environment thereby requiring accountability of the organisation to a wider audience than simply its shareholders. For instance, McDonald and Puxty, in the late 1970s, proposed that companies were no longer the instruments of shareholders alone but existed within society and therefore had responsibilities to that society (1979). One must however, point out that wide recognition of this fact has been a rather recent phenomenon.

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Relating to the above discussion, John and Senbet (1998) have provided a comprehensive review of the Stakeholders theory of corporate governance. The main issue raised in the theory is the presence of many parties with competing interests in the operations of the firm. They also emphasised the role of non-market mechanisms such as the size of the board and committee structure as important to firm performance.

Jensen (2001) offered a critique of the Stakeholders theory for assuming a single-valued objective by identifying share and bondholders as the only interest group of a corporate entity necessitating further exploration. An extension of the theory, the enlightened stakeholder theory, was proposed. However, problems relating to empirical testing of the extension have limited its relevance (Sanda *et al.*, 2005).

2.2.3   Stewardship Theory

This theory, in arguing against the agency theory, posits that managerial opportunism is not relevant (Donaldson & Davis, 1991; Davis, Schoorman & Donaldson, 1997; Muth & Donaldson, 1998). According to the stewardship theory, a manager's objective is primarily to maximise the firm's performance because a manager's need for achievement and success is satisfied when the initial condition of better firm performance is met. One key distinguishing feature of the theory of stewardship is that it replaces the lack of trust to which Agency theory refers with respect for authority and an inclination to ethical behaviour. In summary, the stewardship theory considers the following as essential for ensuring effective corporate governance in any entity:

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- *Board of directors*: The involvement of non-executive directors is important to enhance the effectiveness of the board's activities because executive directors have full knowledge of the firm's operations. This is believed to enhance decision-making and to ensure the sustainability of the business;

- *Leadership*: Contrary to the agency theory, the stewardship theory stipulates that the positions of CEO and board chair should be concentrated in the same individual, the reason being that it affords the CEO the opportunity to carry through a decision quickly and without the hindrance of undue bureaucracy;

- Finally, it is argued that small board sizes should be encouraged to promote effective communication and decision making. What constitutes small, however, is not determined by the theory.

2.2.4   Resource Dependency Theory

This theory, by introducing a critical dimension to the debate on corporate governance, accessibility to resources, and the separation of ownership and control, indicates that a board of directors generally works as a link. Again, the theory points out that, in real practical terms, organisations usually tend to reduce the uncertainty of external influences to ensure that resources are available for their survival and development. By implication, this theory seems to suggest that the issue of the dichotomy between executive and non-executive directors is actually irrelevant. How then does a firm operate efficiently? To resolve this

problem, the theory indicates that what is relevant is the firm's presence on the boards of directors of other organisations to establish relationships in order to have access to resources in the form of information which could then be utilised to the firm's advantage.

It is clear from the foregoing analysis that the above schools of thought have but one single objective, namely proper corporate governance for enhanced performance, though they propose different approaches in addressing the fundamental objective. From the agency perspective, it is argued that the delegation of managerial responsibilities by principals (owners) to agents (managers) necessitates the presence of mechanisms that align the divergent interests of the corporate constituencies or that ensures that managers use their delegated power to generate the highest possible return for the principals. As noted earlier, one of such mechanisms is effective corporate governance. In this vein, the governance mechanism seeks to protect the interests of all stakeholders in a firm.

The structure of laws and accountability issues regarding corporate governance is changing worldwide and directors are being held responsible everyday for the success or failure of the companies they govern. Corporate boards are responsible for major decisions like changing corporation bylaws, issuing shares, declaring dividends, etc. This, to some extent, explains why discussions on corporate governance usually focus on boards. The board of directors is the "apex" of the controlling system in an organisation and it is there to monitor the activities of top management and to ensure that the interests of shareholders are protected (Jensen, 1993; Short *et al.*, 1998). It acts as the fulcrum between the owners and controllers of the corporation (Monks & Minow, 2001). It is the single most important corporate governance mechanism (Blair, 1995). The board of directors is the institution to which

managers of a company are accountable before the law for the company's activities (Oxford Analytica Ltd, 1992:7). Studies have shown that boards of directors are effective mechanism for effective monitoring of managers (Byrd & Hickman, 1992; Fama & Jensen, 1983). Again, Fama and Jensen (1983) extend the argument that boards will be able to effectively monitor management when there are more non-executive directors on the board. According to Tricker (1984), the regulation of companies is necessary to prevent the abuse of corporate power and make the board of directors effective. Apart from the duty of loyalty to the company's shareholders, the board is also responsible for exercising due diligence in decision making. Specifically, it selects, evaluates, and if necessary, replaces the CEO based on performance. Is there any link between corporate governance and firm performance?

2.3   Corporate Governance and Firm performance

It is widely claimed that good corporate governance enhances a firm's performance (Brickley *et al.*, 1994; Brickley & James, 1987; Byrd & Hickman, 1992; Chung *et al.*, 2003; Hossain *et al.*, 2000; Lee *et al.*, 1992; Rosenstein & Wyatt, 1990; Weisbach, 1988). In spite of the generally accepted notion that effective corporate governance enhances firm performance, other studies have reported a negative relationship between corporate governance and firm performance (Bathala & Rao, 1995; Hutchinson, 2002), or find that there is no relationship between corporate governance and firm performance (Park & Shin, 2003; Prevost *et al.,* 2002; Singh & Davidson, 2003; Young, 2003). Reasons for such inconsistencies are several and varying. Some have argued that the restrictive use of either publicly available data or survey data could be part of the problem. It has also been pointed out that the nature of

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performance measures (i.e. restrictive use of accounting-based measures such as return on assets (ROA), return on equity (ROE), return on capital employed (ROCE) or restrictive use of market-based measures (such as Market value of equities) could also contribute to this inconsistency (Gani & Jermias, 2006). Furthermore, it has been argued that the "theoretical and empirical literature in corporate governance considers the relationship between corporate performance and ownership or structure of boards of directors mostly using only two of these variables at a time" (Krivogorsky, 2006). For instance, Hermalin and Weisbach (1991) and McAvoy *et al.* (1983) studied the correlation between board composition and performance while Hermalin and Weisbach (1991), Himmelberg *et al.* (1999), and Demsetz and Villalonga (2001) studied the relationship between managerial ownership and firm performance. Thus, to address some of these problems, it is recommended that a look at corporate governance and its correlation with firm performance should take these issues into account. The present study adds to the literature by employing both market-based and accounting-based performance measures namely return on assets and Tobin's Q, and relating these to governance variables on board characteristics as a proxy for governance. In addition to board characteristics, we also include board activity intensity (using the frequency of board meetings on annual basis), as well as audit committee practices and characteristics. Further to that, we also combine survey and publicly available governance data to broaden the scope of governance. The rationale for this broad set of variables is to reduce, to some extent, the degree of biasedness.

2.4   Data and Methodological Issues

2.4.1   Sample Selection and Variable Description

We employ unique data on a sample of 103 listed companies on the Ghanaian, Nigerian, Kenyan and South African stock exchanges. In addition, we also depended on INET-Bridge for their electronic data. We have to state that our selection of the 103 firms was primarily based on convenience and on their submission of completed questionnaires that elicited data on some of the governance variables. Thus, while the performance variables were largely computed based on the firms' financial statements, most of the governance variables were obtained through the administration of a questionnaire. Firms that were sampled covered the Industrial, Manufacturing, Mining, Agricultural and Service sectors. Table 2.1 shows both country and sector distribution of firms used in the study.

Table 2-1: Firm Distribution by Sector and Country

Country	Sector					
	Industrial	Manufacturing	Mining	Agricultural	Services	Total
South Africa	15	5	15	3	4	42
Ghana	4	10	1	2	5	22
Nigeria	4	3	5	2	2	16
Kenya	8	7	3	3	2	23
Total	**31**	**25**	**24**	**10**	**13**	**103**

In arriving at the definition of what constitutes these sectors, we largely depended on the classifications given by the various stock exchanges. We recognise the possibility of non-uniform classification which could pose a problem with regard to the analysis and results. However, we are of the opinion that such differences are marginal and thus have little impact on compromising the validity of our results. The banking and finance sector is

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omitted in tandem with studies on corporate governance (Faccio & Lasfer, 2000). The sector has peculiar governance issues which make it different from all other sectors. The data covers the period 1997 to 2001.

We used return on assets (ROA) and Tobin's Q as our performance measures. This is in tandem with arguments that suggest that the use of only accounting or market-based performance measures are responsible for the inconsistencies in establishing a clear relationship between corporate governance and corporate performance. We measured ROA as the ratio of Earnings Before Interest and Taxes to Total Assets (EBIT/TA). Refer to Appendix for the measurement of Tobin's Q. A broader interaction in this manner is the only way that can enhance greater appreciation of the relationship between corporate governance and performance of firms. The governance variables are discussed below:

Board Size

The monitoring role of corporate boards has been a central issue in both the financial and the academic press. Organisational theory presupposes that larger groups take a relatively longer time to take decisions and that a larger group will therefore require more input time for a given level of output (Steiner, 1972). Jensen (1993) has since indicated that a value-relevant attribute of corporate boards is its size. What should the optimal board size be? This is a difficult question to answer because it seems to be situated in the realms of relativity and subjectivity against the backdrop of unbiased objective measure. Lipton and Lorsch (1992) have suggested an optimal board size of between seven and nine directors. In this respect, empirical studies have shown that the market values firms with relatively small board sizes

(Lipton & Lorsch, 1992; Yermack, 1996; Sanda *et al.,* 2005; Eisenberg *et al.,* 1998). Hence, as board size increases, board activity is expected to increase to compensate for increasing process losses (Vafeas, 1999). The argument is that large boards are less effective and are easier for a CEO to control. The cost of coordination and processing problems is high in large boards and this makes decision taking difficult. One other issue is that smaller boards reduce the possibility of free riding. We measure the size of the board by the number of directors serving on such boards and expect this to have a negative relationship with firm performance. Hence, we test the following hypothesis:

H_1: The size of the board is negatively related to firm performance.

Board Independence

John and Senbet (1998) argue that a board is more independent if it has more non-executive directors. As to how this relates to firm performance, empirical results have reached inconclusive results. It is asserted that executive (inside) directors are more familiar with a firm's activities and therefore are in a better position to act as monitors with regard to top management. On the other hand, it is contended that non-executive (outside) directors may act as "professional referees" to ensure that competition among insiders stimulates actions consistent with shareholder value maximisation (Fama, 1980). In buttressing this point, most prior research has focussed on board composition and has underscored the important role of outside directors in protecting shareholders' interests through effective decision control (Weisbach, 1988; Cotter *et al.,* 1997). Some research has also found that there is no significant relationship between the number of outside directors and firm performance

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(Hermalin & Weisbach, 1991; Bhagat & Black, 2002). Though it has been shown that the effectiveness of a board depends on the optimal mix of inside and outside directors (Fama & Jensen, 1983; Baysinger & Butler, 1985; Baysinger & Hoskinsson, 1990; Baums, 1994), the available theory on the determinants of optimal board composition is scanty (Weisbach, 2002). We measure the independence of the board by finding the ratio of non-executive directors to board size and we expect this to have a positive relationship with firm performance. Subsequently we test the following hypothesis:

H_2: Non-executive directors have a positive relationship with firm performance.

Board Activity Intensity

In this study, we introduce another variable namely the board activity intensity as an important value-relevant board attribute in tandem with Vafeas (1999). A priori, the nature of the association between board activity intensity and firm performance is not clear. Some contend that board meetings are beneficial to shareholders. Lipton and Lorsch (1992) for instance suggest that "the most widely shared problem directors face is lack of time to carry out their duties". In a similar argument, Conger *et al.* (1998) suggest that board meeting time is an important resource for improving the effectiveness of a corporate board. In support of this, criticisms have been levelled at directors who spread their time too thinly as a result of undertaking too many outside directorships and thereby making it difficult for them to attend meetings regularly (Byrne, 1996). The implication is that when boards of directors meet frequently, they are likely to enhance firm performance and thus perform their duties in accordance with shareholders' interests. Some critics on the contrary, have contended that

board meetings are not necessarily useful in that the limited time outside directors spend together is not used for meaningful exchange of ideas among themselves or with management (Vafeas, 1999). This position has been recognised as a natural consequence of the fact that agenda setting for such meetings is done by chief executive officers (Jensen, 1993). In addition, it is believed that routine tasks absorb much of the meetings and this limits opportunities for outside directors to exercise meaningful control over management and therefore boards would be relatively inactive, becoming more active when there are corporate crises (Jensen, 1993). In view of the debate surrounding board meetings and their relationship with firm performance, the significance of board activity intensity is an open question. We measure the intensity of board activity by the frequency of meetings annually. Though this is an open situation, we test the following hypothesis:

H_3: The number of board meetings is negatively related to firm performance.

CEO Duality

A considerable amount of attention has been devoted to the critical role of a board's ability to monitor managers and remove non-performing CEOs. Jensen (1993) shows a deep concern with regard to the fact that a lack of independent leadership makes it difficult for boards to respond to failure in top management. In this regard, Fama and Jensen (1983) also argue that the concentration of decision management and decision control in one individual hinders a board's effectiveness in monitoring top management. It has also been noted that, when a CEO doubles as board chair, it leads to leadership facing a conflict of interest thereby increasing agency problems (Berg & Smith, 1978; Brickley *et al.*, 1997). It is therefore

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suggested that the two positions should be occupied by two persons. The direction of impact of this variable on firm performance also seems inconclusive. Sanda *et al.* (2005) show a positive relationship between firm performance and separating the functions of the CEO and board chair while Daily and Dalton (1992) have found no relationship between CEO duality and firm performance. Nonetheless, it must be indicated that, when a CEO doubles as board chair, it affords the CEO the opportunity to carry out decisions and projects without undue influence of bureaucratic structures and in this regard it is expected that CEO duality should have a positive relationship with performance (Rechner & Dalton, 1991). We measure CEO duality as a dummy (equals unity when a CEO doubles as board chair and 0 otherwise) and expect a negative coefficient. The hypothesis to be tested is as follows:

H_4: The separation of CEO and Board chair positions has a positive relationship with performance.

CEO Tenure

It has been argued that the tenure of the CEO constitutes another governance mechanism. How long should a CEO serve? In this study, we are arguing that when a CEO serves longer in a firm, it serves as an added incentive to promote the interests of shareholders due essentially to the fact that the CEO becomes a witness to results of decisions taken. In this regard, longer tenure is expected to have a positive influence on performance, though some have indicated that a longer tenure enables CEOs to resort to empire-building with little concentration of productive activities.

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H_5: Longer serving CEOs enhance firm performance.

Audit Committee and its Characteristics

In the US, the *Wall Street Journal* reported in September 1998, that some accounting irregularities that necessitated the restatement of earnings of companies concerned[3] were discovered in the previous year. This event stimulated interest in the effectiveness of audit committees as part of a scheme of structures in corporate governance. The argument was advanced that the audit committee perhaps is the most reliable entity in safeguarding public interest. In addition to the recommendation by the Cadbury Commission, that audit committees should be established, it was also recommended that audit committees should have a minimum size of three members and should consist solely of non-executive directors. This feeds into the independence of such committees. Thus, it is posited that, in an ideal case, a strict independent audit committee is made up solely of non-executive directors and non-affiliates of the company (directors who have worked in the company before). Audit committees thus represent another internal governance mechanism for the improvement of the quality of financial management of a company and hence its performance. However, very little empirical work that examines the impact of audit committees and firm performance has been done. Wild (1994) has shown that markets react favourably to earning reports after the establishment of audit committees. In this study, we have used the size of the audit committee (measured by number of members), its independence (measured by the ratio of non-executive directors/affiliates to the size of the audit committee), and also audit committee activity intensity (measured by the number of meetings per year). While we

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[3] "Accounting Firms Facing More Pressure From S.E.C." *Wall Street Journal*, September 1, 1998, p. C5.

expect the size of audit committee to have a negative relationship with firm performance, we expect both audit committee independence and number of meetings per year to have a positive correlation with firm performance. The following hypothesis will be tested:

H_6: The size of audit committee has a negative relationship firm performance.

H_7: More non-executive directors on the audit committee have a positive relationship with the performance of the firm.

H_8: Intensity of audit committee activities has a positive relationship with the performance of the firm.

Institutional Ownership

It has been argued that the nature of ownership of a firm, which is a dimension of its governance structure, also has an influence on performance. It is known that in countries like Australia, Belgium, Germany and Italy, more than half of listed industrial companies have large blockholders who own at least 50% of such companies (Krivogorsky, 2006). While this is not common in the US, it is contended in Europe that ownership is less dispersed and control rights are not fully separated from ownership. In this study, we consider institutional shareholding measured by the percentage volume of shares held by institutions. Institutions under such circumstances serve as extra monitoring devices concerning the operations of the firm. It is therefore expected that institutional ownership would have a positive relationship with the performance of a firm.

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H$_9$: Institutional shareholding is positively related to performance.

We recognise the difficulty of adequately modelling a firm's performance and thus control for firm size (measured by the number of employees), leverage (measured by the ratio of total debt to assets) and assets tangibility (measured by the ratio of fixed assets to total assets).

2.5   Analytical Framework and Empirical Model Specification

We employ panel data framework for our analysis due basically to its advantage of allowing for more data points. The basic panel data model is of the form:

$$y_{it} = \phi + x'_{it}\alpha + \varepsilon_{it} \tag{1}$$

Where ϕ is a constant, x_{it} is a K-dimensional vector of explanatory variables and ε_{it} is the error term which is further decomposed into the following disturbance terms:

$$\varepsilon_{it} = u_{it} + v_{it} \tag{2}$$

Estimation of the basic model could be done via several methodologies, depending on the behaviour of the component of the error term and whether there is serial correlation between the dependent variable and the disturbance term. Thus, one could employ the

Ordinary Least Squares (OLS) estimation, the Random Effects (RE), the Fixed Effects (FE), or the Dynamic Panel Estimation methods. Why Panel Data methodology? Hsiao (2003) and Klevmarken (1989) highlight some merits of the use of panel data as follows:

i. The use of Panel data controls for individual heterogeneity. The underlying principle of panel data is the assumption that firms, states or countries are heterogeneous. In time series and cross section analysis, this heterogeneity is not taken care of and this poses a threat because of the risk of obtaining biased results (Moulton, 1986, 1987).

ii. Unlike time series studies which are plagued with multi-collinearity issues, panel data gives more informative data, more variability, less collinearity among the variables, more degrees of freedom and more efficiency.

iii. Panel data offers the ability to study the dynamics of adjustment because cross-sectional distribution that looks relatively stable conceals a lot of changes. Again, it is able to measure effects that are difficult to detect in pure cross-sectional or time-series data.

We employ panel data analysis because it was more suited to this study. Our data consist of a a relatively short longitudinal dimension coupled with relatively small cross-sectional observations. Hence, the use of panel data methodology enables us to obtain more data points.

2.5.1   Empirical Model Specification

For the purpose of our empirical analysis, we estimate the following dynamic panel model:

$$y_{i,t} = \delta + \lambda y_{i,t-1} + Z'_{i,t}\psi + u_{i,t},$$ 3

where, $i = 1.............103; t = 1................5,$ and

$y_{i,t}$ is the performance measure of ROA and Tobin's Q for firm i at time t, $Z'_{i,t}$ is a vector of explanatory variables of corporate governance indicators, control variables; and the error term

$$u_{i,t} = \mu_i + \nu_{i,t}$$ 4

An autocorrelation problem occurs due to the presence of the lagged dependent variable among the regressors and individual effects characterising the heterogeneity among the individuals. Thus, in carrying out our estimation we employ the Arellano and Bond estimator which uses additional instruments and utilises the othogonality conditions that exist between lagged values of $y_{i,t}$ and the disturbances $\nu_{i,t}$ (Arellano & Bond, 1991). In this regard, the study adopts the Arellano and Bond (1991) Generalized Method of Moments (GMM) dynamic instrumental variable modelling approach, where the lagged values of the dependent variable (performance) and differences of the independent variables are suitably used as a valid instrument to control for this bias. The use of instruments is important because, in the dynamic panel, the lagged dependent variable $[y_{it} - y_{it-1}]$ will be correlated with the lagged error terms $[e_{it} - e_{it-1}]$ by construct and induce the possibility of endogeneity of some explanatory variables. Based on the following assumptions; no serial correlation in

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the error terms; and weak exogeneity of explanatory variables, the following moments condition applies:

$$E\left[y_{it-1}\left(e_{it} - e_{it-1}\right)\right] = 0 \quad y \geq 2 \qquad\qquad 5$$

$$E\left[z_{it-1}\left(e_{it} - e_{it-1}\right)\right] = 0 \quad y \geq 2 \quad , \qquad\qquad 6$$

where z_{it} is a set of explanatory variables. Arellano and Bond's (1991) GMM estimation is based on these moment conditions and is consistent if lagged values of explanatory variables are valid instruments. The validity of the use of instruments is checked using a Sargan test of over-identifying restrictions which tests for correlation between the instruments and the model residuals.

2.6 Empirical Findings

2.6.1 Descriptive Statistics

Table 2-1: Summary Statistics (Observations=388)

Variable	Mean	Std. Dev.	Min.	Max.
Manager Characteristics:				
CEO Tenure	3.51	1.5	2	8
Board Characteristics				
Board size	9.22	3.41	3	23
Independence	0.42	0.26	0.05	0.85
CEO duality	0.19	0.40	0	1
Number of Board Meetings	10.53	2.15	5	14
Audit Committee Characteristics				
Size of audit committee	4.14	1.18	2	9
Audit committee independence	0.77	0.18	0.33	1.00
Number of annual meetings	4.71	1.50	2	12
Organisational characteristics				
Organisational size (employees)	9873.71	36954.1	20	303098
Organisational age (years)	42.13	23.55	5	154
Institutional shareholding (N=176)	0.56	0.19	0.10	0.91
Organisational growth	0.72	0.38	0	3.35
Finance				
Leverage	0.66	0.24	0.01	0.99
Short-term Leverage	0.29	0.21	0.0013	0.92
Long-term leverage	0.37	0.21	0.001	0.87
Organisational Performance				
Return on Assets	0.13	0.15	-0.43	0.68
Tobin's Q	0.30	0.31	0.002	3.47

Most of the firms represented in Table 2-1 have been operating for the past 42 years, though some have been in existence for over 150 years. On average, these firms employ about 9900 staff members; some, however, employ more than 300,000. It must be pointed out that the sizes of these firms are highly varied considering the minimum and maximum employment levels of 20 and 303098 respectively. In order to estimate the regression model therefore, we employ the logarithm of firm size basically to cater for the wide variation of the variable at levels. It is also evident that most of these organisations have a heavy institutional presence, with 56% representing the mean value of institutional shareholding. We must indicate,

though, that most of the firms did not provide information on this variable. Thus, the 56% represent a sample of the firms that provided this information. The mean growth value of these organisations is 72% though some experienced no growth at certain points during the period under study. While most of the organisations depend on debt as a source of finance for their operations, long-term debt relatively represents the major component of total debt. In comparing accounting and market-based performance measures, it seems the firms are doing relatively better on the market-based measure. While the mean value of ROA is 0.13, that of Tobin's Q is 0.30, indicating an average return on assets of 13%. The mean board size is nine, with a maximum of twenty-three directors. The standard deviation of 3.41 suggests that there is a rather wide dispersion. Hence, in estimating the regression model, the logarithm of the board size is used instead of levels. In tandem with John and Senbet (1998), these boards are relatively less independent as they are mostly dominated by executive directors. The mean value of 0.42 for board independence suggests that about 58% of these boards on average are made up of executive directors. However, some of these boards could be said to be highly independent with 85% of their membership being constituted of non-executive directors. Most of these boards have separate personalities for the CEO and board chair positions, with only about 19% of the firms having the CEO and board chair positions entrusted to the same personality. However small it may be, recent thinking has shown that the appointment of one person into these two key positions has serious repercussions for agency costs and firm performance. Such situations generate enormous conflict of interest because decision control and decision management functions are all embedded in the same person. Not surprising therefore, The King Reports on Corporate Governance in South Africa, among others, recommended a clear separation between the positions of CEO and board chair likewise other regulatory frameworks of corporate governance in the other

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countries. With an annual mean meeting frequency of about eleven, one could say that these boards are relatively busy meeting almost on a monthly basis throughout the year. The question is, does this improve performance or meetings are necessitated by corporate crises? More light could be shed on this in the regression analysis. The audit committees of these firms have member sizes ranging between two and nine, with a mean size of about four members. Most of these boards are dominated by non-executive directors and non-affiliates of these organisations. Thus, one could say that these firms to a large extent have independent audit committees. Unlike the boards, the audit committees have a mean annual meeting frequency of about five, suggesting that the audit committees may be meeting on quarterly basis to attend to business of interest. Not explained by anything, some of these committees virtually meet on a monthly basis for the entire year. The high meeting frequency of some of the audit committees' meetings coupled with some boards meeting fourteen times in the course of the year, suggests that such meetings may be called for problem solving and that this essentially could be due to corporate crises.

2.6.2   Discussion of Regression Results

Board characteristics and activity intensity

Table 2-2: The Effect of Board Characteristics (N=333)[4]

Independent variables	Dependent Variables	
	Return on Assets (ROA)	Tobin's Q (Tob Q)
ROA lagged (-2)	0.1453	
	(2.70)**	
ROA lagged (-1)	-0.0301	
	(-0.57)	
Tob q lagged (-2)		-0.0417
		(-0.81)
Tob q lagged (-1)		-0.1437
		(-2.71)**
Log of board size	0.0212	0.0535
	(0.82)	(2.70)**
Board independence	0.1404	0.0770
	(3.60)**	(0.75)
CEO duality	-0.0474	0.0370
	(-2.06)**	(0.80)
Tenure of CEO	0.0.0230	-0.0047
	(3.81)**	(-0.38)
Frequency of board meetings	-0.0049	0.0029
	(-1.30)	(0.37)
Log of firm size	0.0176	0.0182
	(2.68)**	(1.35)
Assets tangibility	-0.1107	-0.0745
	(-4.14)**	(-1.39)
Leverage	-0.1637	-0.0014
	(-4.26)**	(-0-02)
Constant	0.0013	0.0023
	(2.22)**	(1.91)**
Wald Chi2(10)	197.37	31.44

Note: All regressions include a constant and ** indicates significance at 5% level. T-statistics are in parenthesis.

Table 2-2 shows the model results of the interaction between performance variables and board characteristics including board activity intensity. Contrary to expectations, the size of the board has a positive relation with both performance variables. While it is statistically insignificant in the case of return on assets, it is significant for Tobin's Q. The results

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[4] All models pass the diagnostic testing of validity of instruments via Sargan Test and second order serially correlated errors via AR tests. Results are not shown for brevity.

corroborate other studies that suggest that having a larger board enhances the performance of a firm because there is a range of expertise to help make better decisions, and it is more difficult for a powerful CEO to dominate. In this context, we could assume that, in the wake of privatisation, political appointments to corporate boards which make them large, may be waning and that board members are largely being appointed on the basis of merit and therefore bring their expertise on board to enhance firm performance. The question that still needs attention is whether boards should therefore have limitless membership? This could be best explained by an in-depth understanding of determinants of board sizes which has received very little research attention. However, we contend that boards should have a ceiling taking into consideration the size of the organisation and other peculiar characteristics.

Similar to other studies (Fama, 1980: John & Senbet, 1998), the appointment of outside/non-executive directors makes such boards more independent and enable them to act as "professional referees" to ensure that competition among executive directors promote firm value maximisation. Again, though, the CEO duality is not significant in explaining the variation in Tobin's Q; it has a negative relationship with ROA which is consistent with other studies (Berg & Smith, 1978; Brickley *et al,,* 1997; Sanda *et al.*, 2005). This is because a conflict of interest results when the same person holds the positions of board chair and CEO and agency cost increases which has the potential to stifle performance. This is also consistent with recommendations of the King Report that there should be a clear separation of these key positions in any organisation to ensure accountability and effective monitoring so as to improve performance. Indeed, the Securities and Exchange Commission of Ghana also highlights this situation as does the Institute of Directors (IoD). This is in direct

contradiction to the suggestion that the combination of the two positions in the same individual rather enhances performance due to the seemingly absence of undue bureaucracy regarding decision making and implementation according to the stewardship theory. The organisational tenure of the CEO has a positive relationship with ROA but is insignificant in explaining Tobin's Q. The tenure of the CEO indeed influences a firm's investment decisions. The results of the study contradict studies that have shown that a long tenure does not augur well for performance as the CEO spends energy and time building an empire to control (Abor, 2006). However, we could argue that a longer tenure not only gives job security, but influences a CEO's performance psychologically because of the realisation of the likelihood of investment decisions being witnessed by him/her. Hence, CEOs under such circumstances are likely to be proactive and magnanimous in their decisions because of the psychological influence.

The frequency of board meetings as a measure of board activity intensity has a negative relationship with ROA, but a very weak positive relationship with Tobin's Q. Against the backdrop of high board meeting frequency seen from the descriptive statistics; we could presume that such meetings were mainly due to corporate crises. The results also confirm studies undertaken by Jensen (1993), who argues that board meetings do not necessarily enhance firm performance and that board meeting frequency increases when there are problems. We must, however, indicate that this variable is not significant. Apart from the size of the firm, which shows the expected sign of having a positive impact on performance, asset tangibility and leverage rather show unexpected signs. The findings of the relationship between leverage and performance (ROA) is inconsistent with Bos and Fetherston (1993) who argue that the level of total debt to total assets of a firm has a positive influence on the

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profitability. The case of asset tangibility could however, be explained because assets in themselves do not promote efficiency if they are not managed well and turned in a profitable manner. For instance, one of the leading banks in Ghana with a huge assets base has been performing relatively poorer than other banks with relatively smaller asset tangibility. We must also indicate that the results show that while firms that have been profitable are likely to continue to be profitable, market valuation of a firm today does not necessarily depend on its past market valuation but could be a result of other factors. This is shown by the negative influence of a firm's previous Tobin's Q on current performance. Could it be due to the volatile nature of stock markets?

Audit committee characteristics

The regression results reported in Table 2-3 show that the size of an audit committee has a positive influence on both accounting based measures of performance (ROA) and market-based performance measures (Tobin's Q). Indeed, the size of the audit committee could be an indication of the seriousness attached to issues of transparency and this sends the right signal to the public who then develop confidence in the organisation. Again, Watts and Zimmerman (1986) indicate that there is a tendency for large firms to make accounting choices which reduce the probability of regulatory scrutiny. They also cite other literature documenting the penchant of firms to make accounting choices aimed at smoothing out reported income. In this circumstance, the presence and to some extent the size of an audit committee is an assurance mechanism to promote fairness. The independence of the audit committee however, does not show any significant relationship with any of the performance measures. The frequency of audit committee meetings (activity intensity) has a positive and

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significant relationship with the market-based performance measure of Tobin's Q, but seems to have no relationship with ROA (an accounting-based performance measure). What is the reason? It could primarily be due to the fact that audit committees are generally perceived to serve the interests of shareholders and the public at large. Thus, frequent meetings further re-affirm the position of the organisation in dealing with transparency and working to promote shareholder value. Menon and Williams (1994) have argued that for audit committees to be effective monitors, it is not enough just to be independent: they must be active (measured by the frequency of their meetings). The control variables as well as lagged values of the dependent variables show similar signs and significance to those dealt with in the previous discussion.

Table 2-3: The Effect of Audit Committee Characteristics (N=333)[5]

Independent Variables	Dependent Variables	
	Return on Assets (ROA)	Tobin's Q (Tob Q)
ROA lagged (-2)	0.2354	
	(4.57)**	
ROA lagged (-1)	0.0481	
	(0.96)	
Tob q lagged (-2)		-0.0582
		(-1.17)
Tob q lagged (-1)		-0.1590
		(-3.10)**
Audit committee size	0.0309	0.0401
	(2.20**	(1.42)
Independence of audit committee	0.0977	-0.2157
	(1.16)	(-1.26)
Freq. of audit c'mtte meetings	-0.0006	0.0166
	(-0.10)	(1.56)**
Log of size	0.0193	0.0046
	(2.96)**	(0.35)
Asset tangibility	-0.1005	-0.0442
	(-3.78)**	(-0.85)
Leverage	-0.2129	-0.0134
	(-5.75)**	(-0.18)
Constant	0.0011	0.0022
	(2.32)**	(2.31)**
Wald Chi2(8)	169.95	50.01

Note: All regressions include a constant and ** indicates significance at 5% level. T-statistics are in parenthesis.

Effect of institutional shareholding

Institutional shareholding has a different influence on performance depending on whether an accounting-based or market-based measure is applied. When institutions have more shares in a company, this tends to stifle performance (accounting based) as shown by the results presented in Table 2-4. This however, could be explained by the fact that institutional ownership of share in a firm does not necessarily help the firm to be efficient. What could be relevant is the level of involvement and influence such institutions have on the firms in

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[5] All models pass the diagnostic testing of validity of instruments via the Sargan Test and second order serially correlated errors via AR tests. Results are not shown for the sake of brevity.

which they own shares. Institutional shareholding however, is a key signal to other investors of the potential profitability of the firm. This leads to a higher demand for such shares thereby increasing price and thus improving market valuation of such firms. Hence the results, though surprising, point to an intuitive event that occurs in everyday life.

Table 2-4: The Effect of Institutional Shareholding (N=156)[6]

Independent Variables	Dependent Variables	
	Return on Assets (ROA)	Tobin's Q (Tob Q)
ROA lagged (-1)	-0.1811	
	(-2.69)**	
Tob q lagged (-1)		-0.0367
		(-0.67)
Institutional shareholding	-0.1962	0.3233
	(-3.49)**	(3.04)**
Log of size	0.0220	0.0531
	(2.89)**	(3.65)**
Asset tangibility	0.0036	-0.0330
	(0.07)	(-0.35)
Leverage	-0.1131	-0.1314
	(-3.02)**	(-1.83)**
Constant	-0.0033	-0.0026
	(-1.52)**	(-0.62)
Wald Chi2(5)	28.22	31.29

Note: All regressions include a constant and ** indicates significance at 5% level. T-statistics are in parenthesis.

2.7 Conclusion

The relevance of corporate governance cannot be over-emphasized since it constitutes the organisational climate for the internal activities of a company. Corporate governance brings a new outlook and enhances a firm's corporate competitiveness. The study examined the effect of corporate governance on the performance of firms in Africa by using both market- and accounting-based performance measures. Data covering the five year period from 1997-

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[6] All models passed the diagnostic testing of validity of instruments via the Sargan Test and second order serially correlated errors via AR tests. Results are not shown for the sake of brevity.

2001 was collected from a sample of 103 firms drawn from Ghana, South Africa, Nigeria and Kenya, and the analysis was done within the dynamic panel data framework. Results show that these firms have a heavy institutional presence with a mean institutional ownership of 56%. The mean board size of the sample was nine members but there are wide variations in this variable. The boards are also deemed to be relatively non-independent, with about 58% of their composition being made up of executive directors and there is a clear separation of the functions of the CEO and board chair. The boards of the sampled firms furthermore appear to be very busy with a mean annual meeting frequency of 11. In addition, the firms also have relatively independent audit committees who seem to meet on a quarterly basis.

The regression results further show that the direction and the extent of the impact of governance is dependent on the performance measure being investigated. Results reveal that large and independent boards enhance corporate performance. Whiles, the CEO duality does not significantly impact on the market-based performance measure of Tobin's Q, it has a negative relationship with firm profitability in tandem with other studies. We also found that CEO's tenure in office enhances a firm's profitability and that board activity intensity has a negative effect on profitability consistent with other studies. Furthermore, the size of audit committees and the frequency of their meetings have a positive influence on Tobin's Q (a market-based performance measure) but seem to have no relationship with a firm's profitability. Likewise, it is seen that institutional shareholding essentially sends a positive signal to potential investors and this enhances market valuation of a firm.

From the foregoing analysis, it is evident that corporate governance has an influence on a firm's performance. Indeed, while some of our findings are revealing, clear policy implications should not be lost. For enhanced performance of corporate entities, it is important to separate the positions of CEO and board chair and firms should also be encouraged to maintain relatively independent board and audit committees.

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3 THE DETERMINANTS OF BOARD SIZE AND ITS COMPOSITION:

EMPIRICAL EVIDENCE FROM GHANA[↓]

3.1 Introduction

In the literature of corporate governance, one of the key issues that has stood out is the matter of boards and their characteristics. Corporate boards play a critical role by offering direction and guidance to any corporate entity. The question of what determines the size of a board and its composition has been debated by both academics and practitioners. The Sarbanes-Oxley Act which was enacted in 2002, was a practical attempt to restrict corporate board structure in order to enhance corporate governance in the USA. With regard to academic literature, various investigations relating to various aspects of corporate boards, such as the relation between the proportion of outsiders on the board and firm performance have been undertaken. There is an ongoing debate as to whether existing corporate governance mechanisms promote sufficient protection for investors' capital. In particular, board size and its composition have been the focus of attention. It must also be pointed out that there have been attempts to explain the determinants of board size and its composition theoretically (Raheja, 2005), and some limited empirical studies have also indirectly looked into factors affecting corporate board sizes and their composition (Yermack, 1996; Eisenberg *et al.,* 1998). However, most of these studies have been carried out in advanced economies and mostly on relatively large firms. Determinants of corporate board size and

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composition are critical especially when corporate boards have been the focus of attention for some time now. It is regarded as the apex of the governance structure of any corporate entity. This explains why failure of any company is largely blamed on its board. In Ghana, like most developing economies, corporate boards were largely influenced by political appointments and government interventions. Moving away from a controlled regime to liberalized environment, it is expected that this should give way to corporate ethics and that corporate boards should be seen as being appointed on merit. Indeed, the size and composition of corporate boards has been an issue in Ghana which has necessitated this study. Thus, a study of this nature in a country like Ghana provides further empirical results in the on-going debate. Hence, the focus of this paper is to provide further empirical evidence on the determinants of board size and its composition from a small and developing country perspective. Does this follow standard finance theory or are there some peculiarities?

The rest of the paper is organised as follows; section two reviews related literature; section three looks at the data and methodological issues; section four discusses empirical findings; and section five concludes.

3.2   Literature Review

The corporate board comprises three important positions namely the CEO, the inside directors who are in most cases senior managers of the firm, and outside directors. All of these have knowledge of what a good and a bad project is. The main responsibility of the board is to offer vision and direction to any corporate entity. Indeed, the board is about the

most important constituency of a corporate structure. Every corporate board has at least one outside director and all outside directors benefit from enhanced performance of the firm. The fundamental question concerns what determines the size of a corporate board and its composition. Some studies have investigated board size, composition and linkage with firm performance. Lipton and Lorsch (1992) and Jensen (1993) have shown that the larger the board the greater the difficulty of co-ordination and this adversely affects a firm's performance. They contend that in addition to the fixed cost of observing and producing information, θ, each outside board member also incurs coordination and communication cost, C. Hence, with m outside board members, the total cost of verification of any information given by an inside board member will be given as:

Verification Cost $= \theta + Cm$ 　　　　　　　　　　　　　　　　　　　　　　　　*1*

The implication of the above is that the more outsiders there are on a board, the greater the cost, which invariably affects performance negatively. This is because, it takes more resources from the company to ensure that outside directors obtain the right information thereby increasing operational cost and thus affecting operating profit for the organisation. Previous empirical studies have also used agency theory or strategic contingency models to develop hypotheses with regard to the economic determinants of board size and composition (Beatty & Zajac, 1994). Explanations based on agency theory depend on efficiency propositions and the fact that governance structures are designed to mitigate the effect of agency cost. There is evidence to show that variations in governance structures between firms could be due partly to firm specific variables. Strategic agency models

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consider the linkage between factors that determine company performance and the composition of corporate boards (Pearce & Zahra, 1992).

Thus, in the extant literature on the determinants of the size of corporate boards and their composition, it is evident that these have emanated from agency theory. It has been agued that the optimal size and composition is a function of directors' and firm characteristics (Raheja, 2005). Available evidence on the other hand provides inconclusive results regarding the types of board characteristics that enhance effective monitoring and improved governance (John & Senbet, 1998; Hermalin & Weisbach, 2003). We must indicate that studies on board structure, its composition and effectiveness to monitor the activities of a firm have been few and far between and have tended to be theoretical in nature. For instance, Hermalin and Weisbach (1998) examined the endogenous dynamics of director nominations and CEO entrenchment and its possible effect on board structure. Warther (1998) also looked at the ability of the CEO to fire dissenting board members and its subsequent impact on the decision-making functions of a board. Furthermore, Adams and Ferreira (2003) and Gutierrez (2001) conducted research into designing a board to ensure that there are incentives for the CEO to reveal his private information. It is evident therefore that the board and its structure is a matter of grave concern in the gamut of corporate governance. What then determines the size of a board and its composition? Pincus *et al.* (1989), and Pearce and Zahra (1992), contend that larger firms tend to have larger boards and also more outsiders on their boards. According to Raheja (2005), "firms for which the incentives of insiders are better aligned with those of shareholders, such as those firms in very competitive industries or firms with a high degree of inside ownership require smaller board sizes". It is argued that smaller boards have the ability to save on outside co-

ordination costs related to non-executive directors. A further argument that has been advanced is that firms in which it is easier for outsiders to verify projects, such as grocery store chains, usually have a higher proportion of outside directors. On the other hand, firms in which it is relatively difficult for outsiders to verify projects and operations, for instance high-tech firms, normally have more insiders on their boards. One reason that has been given for this situation is that, when it is difficult to motivate outside directors to verify projects, the firms gain by allowing for competition among insiders in spite of the existence of distortion as a result of private benefits and internal competition. Within the agency cost perspective, the argument is that representation by outside directors will increase with the conflict of interests between management and outside shareholders. In Hermalin and Weisbach's (1998) model, the case is stated that board composition varies with the bargaining ability of the CEO and the degree of uncertainty associated with the CEO's ability. Hermalin and Weisbach (1988) argue that the proportion on non-executive directors of a corporate board is negatively related to the proportion of equity held by insiders. There is further evidence that the composition of a board is determined partly by the ease with which outside shareholders are able to monitor management.

In trying to explore the correlates of board size and its composition, studies in the USA showed that the tenure of the CEO also influences the composition of a board. This variable has yielded inconclusive results. Bathala and Rao (1995), for instance, show a negative relationship between CEO tenure and the proportion of non-executive directors on a board. However, Whidbee in 1997 studied the banking industry in the USA and concluded that there is no relationship between CEO tenure and the proportion of non-executive directors on a board. We must, however, point out that Whidbee was criticized on the basis that the

use of the banking industry is inconsistent with studies on board size and composition, which usually exclude the banking industry. This position was defended and justification was provided for the inclusion of the banking sector.

In the literature, one other variable that has been identified as affecting board composition is investment or growth opportunities available to a firm. This has also produced mixed results. Smith and Watts (1992) posit that:

> *"…manager's actions are less readily observable if the firm has more investment opportunities. It is difficult for shareholders who do not have managers' specific knowledge to observe all investments from which the manager chooses".*

The above presupposes that there is an inverse relationship between the proportion of outside directors on a board and a firm's investment or growth opportunity. This position is confirmed by Bathala and Rao (1995). On the contrary however, Whidbee (1997) finds no evidence of a relationship between a firm's growth or investment opportunity and the proportion of non-executive directors. In the present study we also include the profitability of the firm as a possible determinant. This variable stems from Raheja's (2005) argument that the nature of a proposed project has an influence on board composition. Thus, we associate a successful and less risky project with high probability whereas a more risky project is associated with a higher probability of loss and is therefore considered less profitable. Emanating from this is the issue of risk. It is asserted that firm characteristics do indeed affect board size and composition. In tandem with that position, we again include the

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level of firm specific risk as one of our explanatory variables. In addition, we examine whether the size of the board and its composition is also industry specific.

3.3   Data and Methodological Issues

The study uses annual data covering a six-year period (1998-2003) from 22 firms listed on the Ghana Stock Exchange. Though, there were more than twenty-two firms listed on the stock exchange, year of enlistment and data availability influenced the selection of our sample. The industries that were investigated include Breweries, Manufacturing, Banking and Finance, Petroleum and Distribution. In tandem with Whidbee (1997), we include the Banking and Finance Industry for comparison with other sectors. Due to the small sample size, we recommend that interpretation of the results from this study should be done with some degree of caution.

3.3.1   Dependent Variables

Our dependent variables are board size and board composition. While board size is measured by the number of board members, board composition is the ratio of non-executive board members to the size of the board.

3.3.2   Independent Variables

We use firm risk, CEO tenure, profitability, institutional shareholding, firm growth, and firm size as the explanatory variables. We measure risk (earnings volatility) as the standard deviation of the first difference of the ratio of Earnings Before interest and Taxes (EBIT) to total assets. Thus,

$$Risk = \left[Std.deviation\left(\Delta \frac{EBIT}{TA} \right)\right] \qquad 2$$

The tenure of the CEO is measured by the number of years a CEO serves in that capacity. Return on total assets (ROA) measured by the ratio of EBIT to total assets is used as our measure of profitability. We also measure institutional shareholding as the percentage of shares held by institutions other than insiders. It must be noted that institutional shareholding invariably also indicates the level of insider shareholding. Again, we measure firm growth by finding the rate of change in annual turn-over, and the size of the firm is measured by the value of total assets. As part of the explanatory variables, we also include firm categorical variables to enable us capture the influence of specific firm attributes.

3.3.3   Control Variables

We control for firm age as a proxy for reputation (this is measured by the number of years the firm has been in operation, using the year of incorporation as the starting point), capital

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structure measured by the ratio of total debt to total assets, and a firm's asset structure measured by the ratio of total fixed assets to total assets. The rationale behind the use of control variables is our recognition of the inability to adequately model determinants of board size and composition.

3.4   Analytical Framework and Empirical Model Specification

In carrying out this study, we employ panel data multiple regression techniques. Hsiao (2003) and Klevmarken (1989) showed that the use of panel data gives some advantage over the conventional time series modelling. Some of the advantages in the use of panel data include controlling for cross-sectional heterogeneity by observing individual firms as heterogeneous and this therefore reduces the risk of biasedness in the results (Moulton, 1986, 1987; Baltagi & Levin, 1992). Panel data allows for more data points, more variability, more degrees of freedom and reduces collinearity among the variables. Our basic model is thus specified as:

$$y_{it} = \alpha + X^{/}{}_{it}\beta + u_{it} \hspace{3cm} 3$$

where $i = 1...........................,N; t = 1................................,T$, with i denoting our cross-sectional dimension, firms, and t representing the time series. α is a scalar, β is $Kx1$, X_{it} is the *ith* firm on K explanatory variables and u_{it} the error term. The estimation technique to be applied in the basic panel data modelling is dependent on the behaviour of the components of the error term. Thus, we conduct the Hausman (1978) specification test which is based on a contrast vector H:

$$H = [b^{GLS} - b^w]' [V(b^w) - V(b^{GLS})]^{-1} [b^{GLS} - b^w] ,$$
                                                                                    4

in deciding whether to use the fixed or the random effect technique in our estimation.

3.4.1   Empirical Model Specification

From the above discussion, we specify equation 5 as the estimable model

$$BoardSizenCompo_{it} = \alpha + \beta FirmXtics_{it} + \phi Indus_i + \delta Control_{it} + u_{it}$$
                                                                                    5

where BoardSizenCompo is our dependent variable comprising Board size and Board
composition of firm i in time t; FirmXtics is a vector of explanatory variables for firm i at
time t; Indus is a categorical industry variable relating to firm i; Control is a vector of control
variables for firm i at time t; and u_{it} is the disturbance term.

$$i = 1 .... , 22; t = 1 .... , 6 .$$

3.5   Empirical Findings

3.5.1   Descriptive Statistics

In Table 3-1, of the 22 firms studied, most of them are in the Manufacturing sector. The rest are in the Petroleum, Distribution, Breweries and Banking and Finance industries.

Table 3-1: Industrial Breakdown of Firms

Industry	Number of Firms
Banking and Finance	5
Breweries	3
Distribution	2
Manufacturing	10
Petroleum	2
Total	**22**

Table 3-2 presents the summary statistics. Together these firms have been operating in Ghana for the past 107 years, though most of them have been in the Ghanaian economy for about 39 years. The firms are of varying sizes and are widely dispersed as shown by the standard deviation both in levels and in log form. Other characteristics of these firms are discussed below. Most of the firms depend largely on debt as the main financing option and this is mostly driven by short-term debt. Furthermore, most of the firms have about 63 percent of their total assets in current form, though some have about 97 percent asset tangibility. In addition, these firms have shown some moderate growth potential. With a mean percentage of about 11.2 and the maximum of 54 percent, the firms are relatively profitable. Risk associated with the firms in terms of earnings volatility is also on the lower side and this suggests some relative stability. Table 3-2 also shows that most of these firms are institutionally owned with a mean percentage of about 78 percent. In addition, most of the firms operate with a board of about nine members, the maximum board membership being thirteen, while the minimum is five. It must also be understood that the mean ratio of 0.23 suggests that most of the firms have a small proportion (about 23%) of non-executive

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directors on their boards – an indication of a relative less independent of these boards. The firms with the highest number of non-executive representation on their boards recorded only 40% in this regard. The implication is that most of the firms depend largely on executive directors and are therefore relatively non-independent (John & Senbet, 1998). The average tenure of a CEO stands at three years with the maximum being four years.

Table 3-2: Summary Statistics

Variable	Observations	Mean	Std. deviation	Minimum	Maximum
Industry	132	1.818182	1.40782	0	4
Board size	132	8.901515	1.968686	5	13
Board composition	132	0.2292644	0.10565	0.0909	0.4
CEO tenure	132	2.590909	0.5789507	2	4
Total debt ratio	132	0.5941667	0.1997939	0.18	1.1
Long term debt ratio	132	0.0975	0.1774044	0	0.77
Short-term debt ratio	132	0.4963636	0.2258429	0.09	1.1
Firm age	132	38.5	21.30925	6	107
Firm size	132	8.62e+08	3.44e+09	2,139,398	3.73e+10
Log of firm size	132	18.47002	1.960511	14.57604	24.34177
Asset structure	132	0.3691667	0.2231969	0.02	0.97
Growth opportunity	132	0.3614394	0.5142713	-0.75	4.85
Profitability	132	0.112288	0.0239103	-0.14	0.54
Firm risk	132	0.0112288	0.0239103	0	0.1357
Institutional shareholding	132	78.25487	24.56825	0.0091167	98.55

3.5.2   Discussion of Regression Results

Table 3-3 represents the regression results of the study. The results show that more risky firms have larger boards but have fewer non-executive board members. The rationale behind

having more board members and less non-executive members for risky firms is to tap diverse knowledge especially from executive board members who are conversant with the operations of the firm so as to enhance performance. Raheja (2005) concludes that the size of a board is dependent on a firm's characteristics. In this regard, we have shown that less risky firms use smaller boards and vice versa. The results once again point out that risky firms use rather more inside directors and engage the services of fewer non-executive directors. This corroborates results of the size in that a risky firm requires the services of members who are knowledgeable in the firm and industry and in most cases this can be obtained from inside directors as against outside directors.

Our results show that there is a negative correlation between board size and CEO tenure but a positive relationship between CEO tenure and non-executive board members. The implication of the board size could be explained by the fact that longer CEO tenure reduces the chances of succession of executive board members and this may lead to high inside director turn-over in search of other opportunities. The positive relationship between non-executive directors and CEO tenure rather contradicts findings obtained by Smith and Watts (1992) and Bathala and Rao (1995) who argued that there is an inverse relationship between CEO tenure and the proportion of outside directors on a board. Our findings could be explained by the fact that non-executive directors do not in any case fight for CEO position and therefore may be reluctant in removing a performing CEO. Again, our results show that the profitability of a firm has a positive relationship with the size of a firm's board, but negatively correlated with the proportion of outside directors. These are not significant though.

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The level of institutional shareholding in a firm has a negative relationship with both the size of the board and the proportion of outside directors. The implication is that firms maintain smaller boards and appoint fewer outside directors when institutions have huge stakes as against insider ownership. This rather contradicts findings by Hermalin and Weisbach (1988) who argue that that the proportion of non-executive directors of a corporate board is negatively related to the proportion of equity held by insiders. However, one reason for the situation may be the fact that institutions could also serve as an added control structure thus necessitating the use of smaller boards and fewer outside directors.

Our results suggest that a firm's growth opportunities play an insignificant role in explaining both the size of the board and its composition. Furthermore, the size of the firm is seen to be positively related to the size of the board but insignificantly and negatively related to the proportion of outside directors. The findings confirm studies by Pincus *et al.* (1989) and Pearce and Zahra (1992) who indicated that larger firms tend to have larger boards.

With regards to sectoral classifications, using the Breweries as a reference point, our findings show that while firms in the Distribution sector operate boards that are smaller in size than those in the Petroleum industry, the Banking and Finance sector also uses smaller boards, compared to firms in the Petroleum industry. Among all the industries, the firms in the Manufacturing sector use the smallest boards. While it is understood that firms in the Banking and Finance industry have other regulations and control mechanisms to ensure effective governance, and necessitating the use of smaller boards, the rationale behind the other sectors may be sectoral competition, development and growth.

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With the control variables, the age (as a proxy for reputation) of a firm has a negative relationship with both the size of the board and the proportion of outside directors. This could be explained by the fact that a reputable organization wins the trust and confidence of its shareholders and hence requires relatively relaxed checks and balances to ensure that shareholders" interests are pursued. Again, while the asset structure does not significantly impact on these variables, results show that firms that employ debt use large boards.

Table 3-3: Regression Results

	Dependent Variable	
	Board Size (Fixed Effect Estimates)	Board Composition (Random Effect Estimates)
Explanatory variables		
Risk	9.2715	-0.1802
	(2.28)**	(-0.42)
CEO tenure	-0.8506	0.0522
	(-5.07)**	(2.86)**
Profitability	0.2360	0.1195
	(0.27)	(1.29)
Institutional Shareholding	-0.0055	-0.0016
	(-1.37)	(-3.71)**
Firm growth	-0.1840	0.0073
	(-1.16)	(0.45)
Log of firm size	0.8821	-0.0030
	(16.48)**	(-0.55)
Log of firm age	-1.0759	-0.0244
	(-7.20)**	(-1.50)**
Asset structure	0.3670	0.0673
	(0.60)	(1.06)
Total debt ratio	1.7378	0.0295
	(2.97)**	(0.47)
Manufacturing	-0.1411	-0.1086
	(-0.51)	(-3.62)**
Petroleum	-0.7402	0.0036
	(-1.90)**	(0.08)
Distribution	-1.4852	-0.0013
	(-4.54)**	(-0.04)
Banking and Finance	-0.2527	-0.0829
	(-0.71)	(-2.16)**
Constant	-1.9000	0.3732
	(-1.80)**	(3.26)**
R-squared	0.85	0.15
No. of obs.	132	132
Test of probability	F(13, 113)= 48.24 [0.0000]	Wald Chi2 (13)=60.75 [0.0000]
Hausman test	Chi2 (13)=19.10 [0.1202]	Chi2 (13)=0.13 [1.0000]

Note: All regressions include a constant. T-statistics are in parenthesis and Probability values in square brackets. ** Indicates significance at 5 percent level.

3.6 Conclusion

The issue of what determines the size and composition of a corporate board has engaged the attention of both academics and practitioners and remains an ongoing debate. Though, there have been attempts to explain this phenomenon, most of the studies have been theoretical in nature. This study set out to provide further evidence with an empirical dimension of the determinants of board size and composition. Findings of the study confirm that the size and composition of a corporate board is a function of firm and sectoral characteristics. Specifically, the study finds a positive relationship between firm-level risk and board size. On the other hand, it found that firms with longer CEO tenure and reputation employ smaller boards. Again, the findings of the study contradict other findings, namely that the longer the tenure of the CEO, the smaller the number of outside directors appointed; and also firms with heavy institutional shareholding use fewer outside directors. Furthermore, banks are seen to rely on smaller boards and fewer outside directors probably as a result of the existence of other regulatory mechanisms to ensure good governance in such institutions.

We therefore conclude that the study by and large confirms theoretical expositions that board size and composition are affected by firm as well as industry characteristics. We would however want to indicate that due to our small sample size, interpretation of findings should be with caution.

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CHAPTER FOUR

4 CORPORATE GOVERNANCE AND SHAREHOLDER VALUE

MAXIMISATION: AN AFRICAN PERSPECTIVE[א]

4.1 Introduction

Corporate governance, defined as measures, processes, structures, and a well-defined line of accountability to ensure effective governance and performance of corporate entities, has engaged the attention of both academics and practitioners following the East Asian crisis and recent accounting scandals in the corporate sector involving corporate giants such as Enron and WorldCom. Some of these developments necessitated a closer look at corporate governance matters resulting in its dominance in policy agenda in developed market economies, especially among very large firms. In Africa, corporate governance is receiving the needed attention in recent years, ostensibly due to the poor performance of corporate Africa. Thus, corporate governance is attracting the needed debate at both policy making, academic and practice levels, (Berglof & von Thadden, 1999). On the continent, South Africa has a well developed corporate governance structure comparable to the western world. Countries such as Ghana, Nigeria and Kenya have corporate governance of fledging nature. In Africa, the establishment of an Institute of Directors (IoD), the existing Companies Codes, Stock Market listing rules and regulations and the Securities and Exchange Commission work as supplements rather than substitutes and are the basic

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channels through which corporate governance issues are addressed. In addition to the above, South Africa has the King Reports I and II as another source of reference for corporate governance, though it suffers largely from a lack of the necessary legal backing. Within these frameworks, issues surrounding disclosure, employee and investor protection, corporate social responsibility, insider trading, related party transactions, matters dealing with the responsibilities and privileges of boards of directors are outlined. It should be noted that there are other bodies that play some supervisory role and ensure adherence to good corporate governance practices and ethics in each of these countries.

A considerable amount of research has been undertaken to explore the issue of corporate governance and firm performance, among other linkages, though most of these tended to focus on large and listed firms in the developed markets. Studies on corporate governance in Africa, as mentioned earlier, are few and far between and these studies have largely been case studies on country basis focussing on some aspects of firm performance. This study focussed on how corporate governance directly affects shareholders and this paper is of an empirical nature, exploring the linkage between corporate governance and shareholder value maximisation. In focussing on firms from Ghana, Kenya, Nigeria and South Africa, the current study attempts to do a cross-country study by investigating how board characteristics and other corporate governance indicators enhance shareholder value in these countries. We have therefore moved away from the popular firm performance angle in order to ascertain how shareholders' interest are directly enhanced or otherwise. The strength of this paper lies in its focus on highlighting both country and sector specific effects on shareholder value maximisation. Findings of the study do not only inform practitioners and academics but also contribute meaningfully towards reshaping corporate Africa.

The rest of the paper is organised as follows: section two reviews the literature and section three discusses data and methodological issues. Section four is devoted to empirical findings and section five concludes the paper.

4.2 Literature Review

4.2.1 Theoretical Framework

Studies linking law and finance have largely focussed on corporate governance around the world and concentrated on differences in legal systems across countries. This line of thinking grew out of the finding that laws that protect investors differ significantly across countries and legal origins (La Porta *et al.,* 1998). Recent studies have shown that cross-country differences in laws and their enforcement affect among others ownership structure, dividend payout and market valuations (La Porta *et al.,* 1999, 2000; Claessens *et al*., 2000; Berkowitz *et al.,* 2003; Lombardo & Pagano, 2000). The theoretical framework for corporate governance is the agency theory which indicates that the existence of information asymmetry allows managers of a corporate entity as agents to pursue objectives that may be at variance with those of owners or shareholders (Ross, 1973; Fama, 1980). The agency theory therefore is the foundation on which this empirical study is being conducted. Stemming from "*The Modern Corporation and Private Property*" by Berle and Means (1932), corporate governance gains its strength from a fundamental agency problem in modern firms where there is a separation between management and finance or ownership and control.

The principal-agent paradigm scenario normally generates a conflict of interests. This conflict of interests between managers, or controlling shareholder, and outside or minority shareholders refers to the tendency that the former may be less interested to pursue new profitable ventures.

In its initial development, the agency theory was seen as directly applicable to managers and equity holders with no explicit recognition of other parties interested in the well-being of a firm. This is what is regarded as the shareholder theory and is seen by many as a narrow definition in an attempt to address the interests of the various constituents of a corporate entity. Other studies thus widened the scope and included not only equity holders but all other stakeholders including employees, creditors, governments and others. This approach, which seeks to align the interests of managers with that of all interested parties is known as the stakeholder theory. John and Senbet (1998) undertook a comprehensive review of corporate governance with particular emphasis on the stakeholder theory. In that exercise there was the recognition of the fact that a firm has several interested constituencies who often have competing interests. For instance, while equity holders would welcome and support investment in high yielding but risky projects, such investment would be seen as detrimental to the interest of debt holders.

The principal-agent problem is also an essential element of the "incomplete contracts" view of the firm developed by Coarse (1937), Jensen and Meckling (1976), Fama and Jensen (1983), Williamson (1975, 1985), Aghion and Bolton (1992) and Hart (1995). This is because the principal-agent problem would not arise if it were possible to write a "complete contract". In this case, the investor and the manager would just sign a contract that specifies

ex-ante what the manager does with the funds and how the returns are shared. In addressing this problem there has been propositions within both market and non-market mechanisms. Demsetz and Lehn (1985) provide an elaboration on the drawbacks of the market induced mechanisms for securing the interests of stakeholders. Thus, there is an emphasis on non-market mechanisms, corporate governance, to deal with and reduce agency problems in a firm. There is a considerable amount of empirical work on using corporate governance mechanisms to reduce agency cost and to examine its linkage with firm performance. How does shareholder value maximisation fall within this context?

According to the shareholder model, the objective of the firm is to maximise shareholder wealth through allocative, productive and dynamic efficiency. The criteria by which performance is judged in this model can simply be taken as the market value (i.e. shareholder value) of the firm. Therefore, managers and directors have an implicit obligation to ensure that firms are run in the interests of shareholders.

Shareholder wealth maximisation is a long-term decision and its success largely depends on solid value-based management practice. Indeed, it is the basic requirement that companies are run in a manner that maximises shareholder wealth. Brealey and Myers (1988), Block and Hirt (2000) and others agree that shareholder wealth maximisation should be the overall goal of every corporate entity. Shareholder wealth is the sum total value of the company less the value attributed to debt holders. Woods and Randall (1989) generally accept shareholder wealth as the aggregate market value of the common shares which in turn is assumed to be the present value of the cash flows which accrues to shareholders discounted at their required rate of return on equity.

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Thus, shareholder wealth is the total benefit to shareholders from investing in a company. This includes dividends and perhaps more importantly capital appreciation of the shareholders' investments. Maximisation of shareholders' wealth ensures that shareholders are adequately compensated for risk undertaken (Dufrene & Wong, 1996). Admittedly, shareholder wealth maximisation is not a one-time occurrence. It involves making conscious efforts to grow the resources entrusted to the care of corporate management.

4.2.2   Empirical Literature

Several empirical studies have provided the nexus between corporate governance and firm performance (Yermack, 1996; Claessens *et al.*, 2000; Klapper & Love, 2002; Gompers *et al.*, 2003; Black *et al.*, 2003 and Sanda *et al.,* 2005), with inconclusive results. The main characteristics of corporate governance identified in these studies included board size, board composition, and whether the CEO is also the board chairman.

4.2.2.1   Size of the board

Jensen (1993) and Lipton and Lorsch (1992) have argued that large boards are less effective and are easier for a CEO to control. Raheja (2005) shows that larger boards have higher co-ordination costs. Also smaller boards reduce the possibility of free riding by individual directors and thus increase their decision-making processes – a fact supported by empirical research. For instance, Yermack (1996) shows that for large U.S. industrial corporations, the market values firms with smaller boards more highly. Eisenberg *et al.* (1998) find a negative

relationship between board size and profitability when studying a sample of small and midsized Finnish firms. Mak and Yuanto (2003) also confirmed the above findings in firms listed in Singapore and Malaysia when they find that firms are highly valued by using board membership of five directors; a number considered relatively small in those markets. In a Nigerian study, Sanda *et al.* (2005) find a positive relationship between small-sized boards and corporate performance.

4.2.2.2   Board Independence

John and Senbet (1998) show that the independence of a corporate board is measured by the number of outside or non-executive directors on the board. Thus, the larger the proportion of non-executive directors, the more independent the board is. This variable has produced mixed empirical results in research though a number of studies have shown that the appointment of non-executive board members enhances firm performance (Brickley & James, 1987; Weisbach, 1988; Byrd & Hickman, 1992; Brickley *et al.*, 1994). Baysinger and Butler (1985) and Rosenstein and Wyatt (1990) have also shown that the market rewards firms for appointing outside directors. A general consensus however is that non-executive directors are deemed to act as "professional referees" to ensure shareholder value maximisation (Fama, 1980). Nonetheless, Hermalin and Weisbach (1991) and Bhagat and Black (2002) find no significant relationship between board independence and performance. Yermack (1996) shows that the percentage of outside directors does not significantly affect firm performance. Agrawal and Knoeber (1996) suggest that boards that are expanded for

political reasons often result in too many outsiders on the board, and could affect performance adversely.

4.2.2.3   CEO duality

Should a CEO double as a board chairman? Considerable attention has been given to the role of boards in monitoring managers and in removing non-performing CEOs. Jensen (1993) voices a concern that a lack of independent leadership makes it difficult for boards to respond to failure in top management team. Fama and Jensen (1983) also argue that concentration of decision management and decision control in one individual reduces a board's effectiveness in monitoring top management. It has been noted though, that when a CEO doubles as board chairman, it leads to leadership facing conflict of interests and increasing agency costs (Berg & Smith, 1978; Brickley *et al.*, 1997). Largely, studies have shown that the separation of the two positions enhances shareholders' value.

In carrying out this study, we have given due recognition to the fact that corporate governance involves a set of complex indicators which face substantial measurement error. It would therefore be appropriate to have had a broader set of indicators. However, due primarily to data limitations, we have employed governance indicators such as board size, board independence, CEO duality, size of audit committee and CEO tenure as our governance variables. Unlike previous studies, we focus on examining the impact of corporate governance on shareholders' value maximisation.

4.3   Data and Methodological Issues

4.3.1   Sample and Data

Data used for this study was obtained from 103 listed companies on the Ghanaian, Nigerian, Kenyan and South African stock exchanges. Firms were included in the sample on the basis of data availability and with due regards to year of operation. Again they are firms that responded to the questionnaire administered. They included industrial, manufacturing, mining, agricultural and services sectors. In defining what constitutes these sectors, we largely depended on the classifications given by the various stock exchanges. We acknowledge that there is a possibility of non-uniform classification which could pose a problem with regard to the analysis and results. However, we are of the opinion that such differences are marginal and thus have little impact on compromising the validity of our results. The finance sector is omitted in tandem with studies on corporate governance (Faccio and Lasfer, 2000). The data covers the period 1997 to 2001. For the financial data, INET-Bridge and the various stock exchange fact books served as the main sources and this was supplemented with the administration of a questionnaire for some of the governance variables.

4.3.2   Variable Description and Justification

Several studies have looked at corporate governance and firm performance and others, to some extent, have looked at corporate governance and investor protection by essentially looking at legal and accountability issues related to firms (Klapper *et al.*, 2004). While some have contended that the creation of value by enhancing the performance of a firm indirectly ensures shareholder value maximisation, we counter such argument and advance the point that the performance of a firm many not necessarily impact on shareholder wealth. In this study, we measure shareholder value by looking at dividend yield as our dependent variable. Indeed, the dividend yield is a popular direct measurable benefit that accrue to shareholders. We measure dividend yield as the ratio of total dividend pay-out to total historical price levels.

$$\text{Dividend Yield} = \frac{D_t}{P_{t-1}} \qquad\qquad 1$$

With regard to the independent and governance variables, we capture the size of the board, the independence of the board, whether the CEO doubles as board chairman or otherwise, the tenure of the CEO, and the size of the audit committee. We also include both country and sector categorical variables to ascertain whether the country and specific sectors have any significant impact on shareholder value maximisation.

We measure the size of the board by the number of members on the board. The independence of the board is measured by the ratio of non-executive directors to total board

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size (John & Senbet, 1998). The duality of the CEO is measured as dummy variable with a value of 1 when a CEO doubles as board chairman and 0 when two people are entrusted with the two responsibilities. The tenure of the CEO is measured by the length of time a CEO serves in that capacity. One important variable captured in this study is the size of the audit committee. Though studies have recognized the importance of audit committees in a corporate governance structure, very little attention seems to have been given to this variable and especially to the influence of its size in empirical studies. Due to our recognition of the fact that we are inadequately equipped to model shareholder value maximisation, we capture firm specific characteristics such as firm size (measured by employee size), asset tangibility (measured by ratio of fixed assets to total assets), debt ratio (measured by the ratio of total debts to total assets), firm level risk and firm age, as possible control variables. For the purposes of regression, we find the natural log of employee size and firm age due to the wide variations in these variables at levels. For the purposes of our study, we also measure risk (earnings volatility) as the standard deviation of the first difference of the ratio of Earnings Before Interests and Taxes (EBIT) to total assets. Thus,

$$Risk = \left[Std.deviation\left(\Delta \frac{EBIT}{TA} \right) \right] \qquad 3$$

4.3.3   Analytical Framework and Empirical Model Specification

Our analysis is carried out within a panel data framework, basically because of its advantage of allowing for a broader set of data points. Thus, we specify the basic framework for our analysis in the form of the following regression equation:

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$$Y_{it} = \beta x'_{it} + \alpha z'_{i} + \varepsilon_{it} \qquad\qquad\qquad\qquad\qquad\qquad 4$$

where $(i = 1.........................,N)$ and $(t = 1..............................,T)$

and x_{it} is a *K*-dimensional vector of explanatory variables not including the constant.

In equation (4), the heterogeneity or individual effect is $\alpha z'_i$, where z'_i represents a constant term and a set of observable and unobservable variables. With z' containing only a constant term, OLS thus provides consistent and efficient estimates of the slope vector β.

However, if z' unobserved and correlated with x_{it}, then the OLS estimators are biased and inconsistent due to an omitted variable. Dealing with this situation, we employ either the Fixed or Random Effects Estimations technique by carrying out the Hausman specification test.

4.3.3.1   Empirical Model Specification

We employ a modified version of the model by Wen *et al.* (2002). The modification of the model involves the inclusion of both country and sector categorical variables. This is to enable us capture the impact of country and sector specific effects on the dependent variables of shareholder wealth. Hence our empirical model is specified as follows:

$$\frac{D_{i,t}}{V_{i,t}} = \beta_0 + Z'_{i,t}\beta_1 + Control_{i,t}\beta_2 + \eta_i + \lambda_i + \varepsilon_{i,t},$$
<div align="right">9</div>

where, $i = 1.............103; t = 1.................5,$ and

$D_{i,t}/V_{i,t}$ is a measure of dividend yield for firm i at time t, β_0 is the intercept, $Z'_{i,t}$ is a $1xk$

vector of observations on k explanatory variables for firm i at time t, $Control_{i,t}$ is $1xk$

vector of control variables for firm i and time t, β_1 and β_2 are a $kx1$ vector of parameters,

η_i and λ_i are categorical country and sector specific variables respectively, and $\varepsilon_{i,t}$ is the

error term.

4.4   Empirical Findings

4.4.1   Descriptive Statistics

Table 4-1: Summary Statistics

Variable	Observations	Mean	Std. Dev.	Minimum	Maximum
Dividend yield	388	0.085706	0.0971097	7.93e-06	1.102996
Normalised EPS	388	0.011399	0.0253487	-0.0179616	0.1890727
Board Size	388	9.224227	3.409779	3	23
Board Independence	388	0.419022	0.259989	0.05	0.846
CEO duality	388	0.193299	0.3953953	0	1
CEO tenure	388	3.510309	1.585593	2	8
Audit committee size	388	4.146907	1.188474	2	9
Asset tangibility	388	0.4486696	0.2532175	0.005	0.9986
Firm risk	388	0.0496657	0.0712374	1.00e-05	0.68973
Firm age	388	42.13918	23.55106	5	154
Firm size	388	9873.709	36954.1	20	303098
SDR	388	0.2917814	0.2146533	0.0013022	0.9159
LDR	388	0.3722482	0.2076858	0.001	0.8736
Leverage	388	0.6636894	0.2410705	0.006	0.991

Note: SDR and TDR are Short-term and Long-term leverage respectively; DPS and EPS are dividend and earnings per share respectively.

Of the 103 companies, 31 were in the Industrial sector, 25 in the Manufacturing sector, 24 in the Mining sector, 10 in the Agricultural sector, and 13 in the Services sector. These companies were unevenly distributed across countries, with South Africa and Nigeria contributing the largest share. Most of the mining companies were in the South African sample. The mean dividend yield of 0.085706 and that of earnings per share of 0.011399 shows the impact interest and taxes have on firms' profits. This is supported by the minimum and maximum values. The size of corporate boards in our sample is highly dispersed considering the minimum of 3 and a maximum of 23 board members. This is also supported by a high standard deviation of about 3.41. Again, there is a high variation between and within firms with regard to board size; most of the firms in our sample operate with a board size of about nine members. The descriptive statistics show that most of the boards in the sample have more executive directors than non-executive directors. This is shown by a mean value of 0.42, suggesting that about 42 percent of all boards are made up of non-executive directors. This means that corporate boards in these countries are less independent John and Senbet (1998). However, some are very independent with about 84.6 percent of the members being non-executive. At the tip of most governance structures in the sample, there is a clear separation between the person occupying the position of chairman of the board from the person occupying the position of CEO. The mean value of about 19 percent indicates that of the 103 firms, just about 19 percent have both CEO and board chairman positions embedded in one person. These CEOs serve a term ranging between two and eight years with most of them serving a term of about three-and-a-half years. All the sampled firms have audit committees in place with a mean size of about four members and a minimum and maximum size of two and nine members respectively. Most of the firms have a relative balance between current and fixed assets with a mean value of about 45 percent

representing asset tangibility and most of the firms have been operating for about 42 years. However, there is wide variation between the ages of these firms, with minimum and maximum operational years of five and a hundred and fifty-four respectively. Using the number of employees as a proxy for firm size, there is wide variation between and within firms. While, the smallest firm has 20 employees; the largest has over 300,000 employees. Most of these firms are heavily dependent on debt as a source of finance for their operations as against equity and this is driven by long-term debt rather than short-term debt.

4.4.2   Discussion of Regression Results

General regression

The regression results in Table 4-2 show the interaction between the dependent and independent variables. The results show that the size of a board enhances shareholder value maximisation and leads to higher dividend yield. This is rather contrary to studies by Jensen (1993), Lipton and Lorsch (1992), Mak and Yuanto (2003), Yermack (1996), Eisenberg *et al.* (1998) and Sanda *et al.* (2005). However, it could be explained that the presence of large board sizes affords corporate entities the opportunity to enjoy the depth and experience a large pool could bring to bear on its operations. This inevitably enhances firms' performance and promotes shareholder value maximisation. Results concerning the independence of the board shows that it is negatively related to dividend yield contradicting studies by Rosenstein and Wyatt (1990), Weisbach (1988), Byrd and Hickman (1992), Brickley *et al.* (1994), Baysinger and Butler (1985), and Brickley and James (1987) who showed that the independence of the board enhances a firm's worth and shareholder value. However, studies by others such as Hermalin and Weisbach (1991), Bhagat and Black (2002), Yermack (1996)

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found no significant relationship between a board's independence and shareholders' value. Again, Agrawal and Knoeber (1996) have indicated that a board that is increased for political reasons leads to many outsiders being appointed, but this does not enhance performance. We should point out at this stage that with the exception of South Africa, Ghana, Kenya, and Nigeria are at the lower ebb of development with governments owning huge shares in many corporate entities. In tandem with theory and other empirical findings, a situation where a CEO serves as a board chairman leads to greater conflict of interest and higher agency cost resulting in lower firm and shareholder value (Berg & Smith, 1978; Brickley *et al.*, 1997; Rechner & Dalton, 1991; Sanda *et al.,* 2005). Indeed, Fama and Jensen (1983) point out that the concentration of decision management and decision control in one individual reduces a board's effectiveness in monitoring top management and has a negative impact on firm and shareholder value. The CEO tenure also has a negative impact on firm and shareholder value. Though surprising, studies have shown that when a CEO holds tenure for a longer period, most of the time is spent on achieving personal objectives and on empire building for personal satisfaction and entrenchment rather than using time for productive purposes (Abor, 2006). Our findings also show that larger audit committees have adverse effects on shareholder value. This is due to increased co-ordination and problem processing costs as well as the possibility of free riding by other members. The control variables largely showed the expected signs. However, the age of a firm as proxy for reputation surprisingly showed a negative effect on shareholder value maximisation.

Table 4-2: Regression Results (Random Effects Estimates)

	Dependent Variable
	Dividend Yield
Regressors	
Board size	0.0070861
	(2.98)**
Board independence	-0.0597712
	(-2.59)**
CEO duality	-0.0300516
	(-2.22)**
CEO tenure	0.0058782
	(1.68)
Size of Audit committee	-0.011076
	(-1.60)
Firm level risk	-0.0653713
	(-0.94)
Asset tangibility	0.0633562
	(3.26)**
Leverage	-0.0136886
	(-0.58)
Log of size	-0.0002731
	(-0.07)
Log of age	-0.019529
	(-2.07)**
Constant	0.0656252
	(1.43)
R-squared	0.9580
No. of observations	388
Test of Probability	Wald Chi2(10)=34.78
	$[0.0001]$
Hausman test	Chi2 (10) = 0.00
	$[1.0000]$

Note: All regression includes a constant. T-statistics are in parenthesis and Probability values are in square brackets. ** indicates significance at 5 percent level.

Sector Specific Effects

Table 4-3 presents a categorical regression model run to ascertain the effect of specific sectors on shareholder value maximisation. In our model, we use the industrial sector as the reference point to which all other sectors are compared. Our results show that the mining sector pays a higher dividend compared to the industrial sector. This conforms to empirical

evidence that the mining sector is associated with relatively higher profits and thus is in a position to give more to shareholders in the form of cash dividends. Following closely are the Agriculture and Services sectors which also appear to be paying a higher dividend to its shareholders relative to the Industrial sector. However, the results are not significant. The Manufacturing sector on the other hand is seen to be paying less to its shareholders in terms of dividend compared to the industrial sector.

Table 4-3: Regression Results Sector Specific Effects Random Effects Estimates)

	Dependent variable
	Dividend Yield
Agriculture	0.0110
	(0.68)
Manufacturing	-0.0033
	(-0.26)
Mining	0.1145
	(5.36)**
Services	0.0071
	(0.47)
Constant	0.1445
	(3.01)**
R-squared	0.57
No. of observations	388
Test of probability	Wald Chi2(4)=68.66
	[0.0000]

Note: All regression includes a constant. T-statistics are in parenthesis and Probability values are in square brackets. ** indicates significance at 5 percent level.

Country Specific Effects

With the obvious differences in development levels of the countries in our study, we decided to ascertain whether there is any country specific impact on shareholder value maximisation. In doing this, we used South Africa as the reference point as it is the most developed. The results are presented in Table 4-4. The results show that Ghana ranks higher in the payment of dividend yield and is closely followed by Kenya and Nigeria, respectively. These countries

appear to be paying a higher dividend yield than South Africa. This is in tandem with finance theory of the relationship between risk and returns. The results thus, suggest that South Africa has relatively lower country specific risk as compared to the other countries.

Table 4-4: Regression Results Country Specific Effects

	Dependent variable
	Dividend Yield
Ghana	0.1318
	(5.02)**
Nigeria	0.0834
	(3.44)**
Kenya	0.0979
	(3.48)**
Constant	-0.1560
	(-2.47)**
R-squared	0.93
No. of observations	388
Test of probability	Wald Chi2(4)=64.62
	[0.0000]

Note: All regression includes a constant. T-statistics are in parenthesis and Probability values are in square brackets. ** indicates significance at 5 percent level.

Conclusion

Corporate governance has been identified as one of the key elements that impact an entity's performance. Though some studies have investigated the linkage between corporate governance and firm performance, this study examined corporate governance and its impact on shareholder value maximisation especially within the African context on selected African countries. Results showed that, though highly dispersed both within and between firms, most firms in the sample make use of boards of nine members and that corporate boards in the sample are relatively less independent. The regression results, contrary to expectations, showed that large board sizes enhance shareholder value maximisation. The independence of corporate boards rather had a negative effect on shareholder value maximization while

having a CEO serving a dual role as board chairman was identified to increase agency cost thereby having a negative impact on shareholders wealth. The results confirm previous studies that indicate that having a CEO serve for a longer term has an adverse effect on corporate wealth and shareholder value due essentially to productive time being wasted on empire building and the pursuance of personal objectives.

Our study also showed that both sector and country specific effects impact shareholder value maximisation. The mining sector is seen as dominant in the payment of a higher dividend yield. The study finally showed that shareholder value maximisation is also dependent on the level of country specific risk – with countries with low risk paying less cash dividend and vice versa in tandem with risk-return configuration in finance theory. The foregoing analysis induces us to recommend that it is imperative for stakeholders to recognise the critical role of corporate governance in maximising shareholders' value and thus work in harmony to promote efficient structures in corporate entities.

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5   CORPORATE GOVERNANCE AND FINANCING CHOICES OF FIRMS IN KENYA: A PANEL DATA ANALYSIS[ℵ]

5.1   Introduction

The concept of corporate governance has been mostly applicable in developed markets and essentially to large and listed firms. In recent times, however, the term is on the development agenda of many developing economies due to the realisation that corporate governance is important for the promotion of sustained growth as it boosts the bottom line. Corporate governance has two meanings. It firstly refers to the relationship between a firm and its stakeholders, including shareholders, employees, creditors, competitors, consumers, etc. In the second definition, corporate governance is seen as signifying the mechanism for checking and monitoring the behaviour of top management due to separation of ownership and control. Thus, corporate governance refers to the clear establishment of how an organisation ought to be run and controlled and ensure accountability on the part of management towards owners. Studies have shown that corporate governance enhances performance (Gompers *et al.*, 2003; Claessen *et al.*, 2003).

The question we are trying to answer in this study concerns whether there is any relationship between how an organisation is governed and its financing decisions or capital structure using data from Kenya. After the much cited seminal work by Modigliani and Miller (M&M)

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in 1958 on capital structure, a host of further studies have been conducted in the area of capital structure. This has resulted in a number of both theoretical and empirical research projects. A segment of this vast research has concentrated on the determination of the explanatory factors of capital structure. We could query whether the issue of capital structure or financing decisions has any relevance in the study of corporate finance. It must be noted that a critical decision that confronts every corporate entity is the nature of its capital structure. In this view, a firm must decide between equity and debt according to Glenn and Pinto (1994). At present, only a very scanty study of the link between corporate governance and financing decisions of firms has been undertaken, especially in Africa. Studies by Berger *et al.* (1997), Friend and Lang (1988), Wen *et al.* (2002), and Abor (2006) have provided some link between corporate governance and financing decisions of firms. While the other three studies looked at the issue from a relatively developed market perspective, Abor's study considered SMEs in Ghana.

This study therefore looks at the issue of corporate governance and its relationship with the financing decisions of firms. It is necessitated by the fact that there have not been enough studies in the area especially in Sub-Saharan Africa. Hence, by using panel data from 47 firms listed on the Nairobi Stock Exchange covering the five-year period of 1999-2003, the study adds to the current literature on governance and financing decisions of firms in Africa especially since no study of this nature has been done in Kenya.

The organisation of the rest of the paper is as follows: Section two deals with both theoretical and empirical literature by way of a literature review; Section three looks at

methodology, data, and variable description; Section four discusses empirical findings, and Section five draws conclusion emanating from the study findings.

5.2   Literature Review

5.2.1   Theoretical Literature

Corporate governance has been defined variously by various authors. Metrick and Ishii (2002) define corporate governance from the perspective of the investor as "both the promise to repay a fair return on capital invested and the commitment to operate a firm, efficiently given investment". This definition simply suggests that the nature of the governance structure of a firm has an impact on the firm's ability to access the capital market. The Cadbury Committee (1992) defines corporate governance as "the system by which companies are directed and controlled". Mayer (1997) sees corporate governance as concerning ways of bringing the interests of investors and managers into line and ensuring that firms are run for the benefit of investors. Corporate governance is concerned with the relationship between the internal governance mechanisms of corporations and society's conception of the scope of corporate accountability (Deakin & Hughes, 1997). Furthermore, it has been defined by Keasey *et al.* (1997) to include "the structures, processes, cultures and systems that engender the successful operation of organisations". Shleifer and Vishny (1997) have described corporate governance as "the ways in which suppliers of finance to corporations assure themselves of getting a return to their investment". Thus, corporate governance could be summarized as the processes, measures and established line of responsibility and accountability a company puts in place to ensure that the organisation does well regarding financing and performance.

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Previous studies on financing decisions have largely been based on famous capital structure theories such as the tax-based theory, the signalling theory and the agency theory. The tax-based theory suggests that firms choose their debt-equity ratio by trading-off the benefits from tax reduction on interest payments against the potential costs of financial distress owing to the accumulation of more debt. Yet, in firms where individuals who supply capital do not run the firms themselves, there comes to the fore two types of information asymmetry problems. The first results from adverse selection because the controlling managers may have access to information that is not known to the outside investors. Under such circumstances, the method of financing can serve as a signal to outside investors of the possibility of the existence of new investment avenues or otherwise to the firm. Therefore the existence of information asymmetry between insiders and outsiders results in firms having a financial hierarchy in which retained earnings are used first and the firms gradually moves downwards to risk-less debt when internal funds run out – the pecking order theory. It has also been argued that equity is only issued when firms do not have debt capacity, according to Myers (1984) and Myers and Majluf (1984).

Another problem that emanates from information asymmetry is the principal-agent conflict referred to as the agency cost. It is the presence of moral hazard in the firm that leads to the conflict called agency cost of equity. In such instances, managers may pursue their own interests against the interests of shareholders. One way to deal with this agency problem is to employ debt financing as a disciplining tool on managers (Jensen, 1986; Stulz, 1990). It must however be indicated that debt financing creates other agency costs in its wake. Thus, the decision to employ either debt or equity for financing the operations of a firm is a critical

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issue. In this study we are attempting to find out the role of corporate governance in this important decision.

5.2.2 Empirical Literature

There have been some studies that link corporate governance and financing decisions of firms. For instance, Berger *et al.* (1997), Friend and Lang (1988), Wen *et al.* (2002), and Abor (2006), showed that the nature of corporate governance in a firm has an influence on the financing decisions of firms. The main corporate governance characteristics that have been identified as impacting on financing decisions of firms include board size, board composition, CEO duality, tenure of the CEO, and CEO compensation. The empirical literature on governance and capital structure so far, though scanty, show varied results and seem largely inconclusive.

The board of any corporate entity is the highest decision-making body entrusted with the responsibility of ensuring that the firm operates efficiently and competitively. The board's size, measured by the number of people that constitute the board has a significant relationship with the financing decision of a firm according to Pfeffer and Selancick (1978) and Lipton and Lorsch (1992). Berger *et al.* (1997) showed that firms with larger boards tend to have low leverage or rather concentrate on equity financing. The underlying principle is that a large board inevitably translates into coercion from the board on managers to rather depend on less debt to enhance firm performance. A critical issue raised by Jensen (1986) is that firms with a high leverage or debt ratio have larger boards. This twist introduces an issue of causality. The question relates to whether firms resort to high leverage because they

have larger boards or whether they increase board size because they are highly leveraged. Studies into this dimension are largely non-existent. However, empirical results from China by Wen *et al.* (2002), and by Abor in Ghana (2006) point to a positive relationship between board size and leverage. These findings presuppose that large boards which are relatively more entrenched due to monitoring by regulatory bodies, target higher leverage to enhance corporate value. It could also be due to the difficulty of arriving at consensus in decision-making. Such a scenario has the tendency of weakening corporate governance, leading to dependence on high leverage. Furthermore, Anderson *et al.* (2004) point out that the cost of debt is lower for larger boards probably due to the fact that creditors view these firms as essentially having in place effective monitoring mechanisms.

The nature of the relationship between board composition (measured by the proportion non-executive directors of the board) and capital structure is indeterminate. From the resource dependence approach propounded by Pfeffer (1973) and Pfeffer and Salancick (1978) it is advanced that when a firm has more external directors it enhances the firm's ability to protect itself against the external environment and uncertainties among others. This increases the ability of the firm to raise funds or increase its value. Thus, a higher proportion of non-executive directors is associated with higher leverage. While Wen *et al.* (2002) found a negative relationship between proportion of outside directors and leverage (Abor, 2006; Berger *et al.*, 1997) on the other hand show that firms with more outside directors tend to be highly leveraged consistent with the resource dependence theory.

Studies have also shown that the nature of board structure (CEO duality) also has a relationship with the financing decisions of a firm. In this case, research have centred on 1-

tier and 2-tier board structures. A firm is said to have a 1-tier board structure if the CEO also serves as the board chairman. On the other hand, in a situation where the CEO and Chairman positions are occupied by two distinct individuals, the firm is said to have a 2-tier board structure in place. In the single tier board structure typology, it is deemed that the two critical issues of decision management and control are vested in the same individual. This has however, been deemed inappropriate (Fama & Jensen, 1983). Fama and Jensen (1983) defined decision management as the right invested in a CEO to initiate and implement new proposals warranting expenditure of the firm's resources, and decision control comprises the right to ratify and monitor those proposals. Hence there exists a conflict of interests and higher agency cost if these are done by the same individual signalling the lack of separation of "decision management and decision control". Forsberg (2004) has shown that a 2-tier board typology is characterised by a higher leverage or debt equity ratio compared to a 1-tier leadership scenario. Abor (2006) in a Ghanaian study however, found a negative relationship between 2-tier board structure and leverage.

CEO tenure and compensation are other governance characteristics that have an impact on the financing decisions of firms. Tenure refers to the number of years a CEO serves and it has been empirically identified as having a negative relationship with leverage or debt ratio of firms (Berger *et al.*, 1997; Wen *et al.*, 2002). This is because entrenched CEOs (with relatively longer tenure in office) prefer low leverage to reduce the performance pressures associated with high debt. On the other hand, CEOs with fixed attractive compensation have the tendency of pursuing lower leverage ostensibly to reduce the financial risk associated with debt so as to keep their jobs and enjoy the attractive compensation (Stulz, 1988; Harris & Raviv, 1988). Evidence from empirical studies on the contrary, has produced mixed results.

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For instance, Jensen & Meckling (1976); Leland & Pyle, (1977); and Berger *et al*, (1997), showed a positive association between the CEO's compensation and a firm's debt ratio, while Wen *et al.* (2002), Friend and Hasbrouck (1988), and Friend and Lang (1988), found a negative relationship between compensation and leverage.

5.3   Data and Methodological Issues

5.3.1   Variable Description

Data for the study is obtained from forty-seven companies listed on the Nairobi Stock Exchange in the five-year period covering 1999 and 2003. For the dependent variable, we use the firm's debt ratio measured as the ratio of total debt to total assets (LEV=Leverage). For a deeper understanding of further relationships, we break down leverage into short-term leverage (STL) and long-term leverage (LTL), and these are measured as the ratio of short-term debts and long-term debts to assets respectively. Regarding the independent variables, we employ Board size (BDS) measured by the number of board members; Board composition (BDC) measured by the ratio of non-executive board members to board size as a measure of board independence, and CEO duality (CEO) is a dummy (equal to unity when a CEO serves as board chairman and zero, otherwise). CEO tenure and compensation were not disclosed by the firms. Due to model specification inadequacy, we include some standard determinants of capital structure as control variables. These include profitability, firm risk, firm size, firm age and firm growth opportunity. We measure profitability as return on assets (ROA) captured by the ratio of EBIT (earnings before interest and taxes) to total assets; firm size (SZE) is measured by using net total assets; CIN is firm's growth rate and is measured

by the annual rate of change in turnover (i.e. $\left[\dfrac{TurnOver_t - TurnOver_{t-1}}{TurnOver_{t-1}}\right]$); age (AGE) is

measured by the number of years of operation, using the year of incorporation as the

reference; and firm risk (RSK) is measured by earnings variability.

5.3.2   Analytical Framework and Empirical Model Specification

Our analysis is carried out within the panel data framework due basically to its advantage of

allowing for a broader set of data points. Thus, we specify the basic framework for our

analysis in the form of the following regression equation:

$$Y_{it} = \beta x'_{it} + \alpha z'_{i} + \varepsilon_{it} \tag{1}$$

where $(i = 1.........................., N)$ and $(t = 1..............................,T)$

and x_{it} is a *K*-dimensional vector of explanatory variables not including the constant.

In equation (1), the heterogeneity or individual effect is $\alpha z'_i$, where z'_i represents a

constant term and a set of observable and unobservable variables. With z' containing only

a constant term, OLS thus provides consistent and efficient estimates of the common and

the slope vector β.

However, if z' is unobserved and correlated with x_{it}, then the OLS estimators are biased

and inconsistent, due to an omitted variable. In dealing with this situation, it is

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recommended to employ either the fixed or random effects models. The fixed effect is specified as shown in the following equation:

$$y_{it} = \beta x_{it} + \alpha_i + \varepsilon_{it} \ , \qquad\qquad\qquad 2$$

where $\alpha_i = \alpha z'_i$ and captures all the observable effects and specifies an estimable conditional mean. Since the fixed effects is not time variant and therefore non-stochastic, we consider the random effects which operates on the assumption that the individual unobserved heterogeneity formulated is uncorrelated with the included variables, as shown in the following equation:

$$y_{it} = \beta x'_{it} + E(\alpha z'_{it}) + [z'_i - E(\alpha z'_i)] + \varepsilon_{it} \ , \qquad\qquad 3$$

which could be reduced to the form

$$y_{it} = \beta x'_{it} + \alpha + \varepsilon_{it}{}^{*} \qquad\qquad\qquad 4$$

This is a linear regression model with a compound disturbance that may be consistently estimated by least squares. Thus, the use of either the fixed or random effect technique is dependent on the behaviour of the components of the error term (equation 5):

$$\varepsilon_{it} = \mu_i + v_{it} \qquad\qquad\qquad 5$$

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[*] (See Verbeek, M., 2004. A guide to modern econometrics)

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5.3.3 Empirical Model Specification

From the above, our model is based on that of Wen *et al.* (2002) with some modifications. The modification of the model involved the inclusion of other standard capital structure variables that are not captured in the model used by Wen *et al.* (2002). Hence the model is specified as follows:

$$Y_{it} = \alpha_0 G_{it} + \alpha_1 X_{it} + \ell_{it} \; , \qquad\qquad\qquad 6$$

where Y_{it} is the dependent variable (leverage) measured by the ratio of debt to assets. G_{it} is a vector of governance characteristics; X_{it} is a vector of standard capital structure variables serving as control, and ℓ_{it} is the error term. Thus, Y_{it} captures short-term leverage, long-term leverage, and total leverage; G_{it} captures Board size, Board composition and CEO duality as a measure of corporate governance. With short-term leverage, we are referring to debt obligations with a maturity period of one year or less and long-term leverage comprises debt obligations with a maturity period that expands beyond one year.

5.3.4 Estimation Issues

The most basic estimator of panel data sets is the pooled OLS. In the simplest case, in which there are no firm specific and time specific effects, the ordinary least square is the most appropriate. Johnston and DiNardo (1997) recall that the pooled OLS estimators ignore the panel structure of the data, treats observations as being serially uncorrelated for a

given firm, with homoscedastic errors across individuals and time periods. A more appropriate approach is therefore to estimate the model using panel data techniques. In estimating our model, unobservable effects could be accommodated using one of two techniques. To reduce the number of parameters to be estimated, it is possible to justify treating the individual fixed effects as being drawn from some distribution. The parameters of this distribution then become parameters to be estimated with the unobservable effects included in the error term. The variance-covariance matrix of the resulting non-spherical errors is transformed to obtain consistent estimates of the standard errors. In this case, the random effects estimator is the most appropriate (Hsiao, 1989).

However, a problem arises with the random effects estimator if the unobservable effects, which have been included in the error term, are correlated with some or all of the regressors. This simultaneity makes the random effects estimator inconsistent. As a consistent alternative to the random effects estimator, a dummy variable could be included for each firm. This estimation approach, known as fixed effects, yields consistent estimates regardless of correlation between firm specific error components and the regressors. However, it is less efficient than the random effects estimator. The inefficiency arises because the fixed effects estimator requires a separate parameter to be estimated for each firm in the sample in place of the single variance estimate that is required for the random effects estimator.

5.3.5   Choosing between Random or Fixed Effects Technique

Hausman (1978) suggested a test to check whether the individual effects are correlated with the regressors. Under the null hypothesis of orthogonality, that is, no correlation between

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individual effects and explanatory variables, both random effects and fixed effects estimators are consistent, but the random effect estimator is efficient, while the fixed effects is not. Under the alternative hypothesis that individual effects are correlated with the regressors, the random effects estimator is inconsistent, while the fixed effects estimator is consistent and efficient.

In addressing this problem, Greene (1997) recalls that, under the null hypothesis, the estimates should not differ systematically. Thus, our test is based on a contrast vector H:

$$H= [b^{GLS}-b^{w}]\,'[V(b^{w})-V(b^{GLS})]^{-1}[b^{GLS}-b^{w}] , \qquad\qquad 7$$

where H is approximately chi-squared distributed with k degrees of freedom and k is the number of regressors excluding the constant. Thus, in carrying out our regression, we test the hypothesis that there is no correlation between individual effects and the explanatory variables using our baseline model and the results of the Hausman specification test reported in subsequent tables.

5.4   Empirical Findings

5.4.1   Descriptive Statistics

Table 5-1: Summary Statistics

Variable		Mean	Std. Dev.	Min.	Max	Obs.
BDS	Overall	7.8066	2.6188	3	13	N=212
	Between		2.6720	3	13	n=47
	Within		0	7.8066	7.8066	T=4.5
BDC	Overall	0.177089	0.1274265	0	0.71248	N=212
	Between		0.1264454	0	0.71428	n=47
	Within		0	0.17779 0.17779		T=4.5
CEO	Overall	0.1698113	0.3763556	0	1	N=212
	Between		0.3798826	0	1	n=47
	Within		0	0.1698113	0.1698113	T=4.5
ROA	Overall	0.0815525	0.5648411	-2.3421	7.73582	N=212
	Between		0.2510516	-0.460781	1.542153	n=47
	Within		0.5011093	-1.799766	6.275219	T=4.5
STL	Overall	0.4049035	0.2900415	0.010087	0.9975	N=212
	Between		0.0482773	0.3663556	0.489746	n=47
	Within		0.2876244	0.0049418	0.982267	T=4.5
LTL	Overall	0.7875697	0.680053	0.00125	5.5357	N=212
	Between		0.1072186	0.5859774	0.8661719	n=47
	Within		0.68233289	0.0558261	5.547257	T=4.5
LEV	Overall	1.192473	0.6553353	0.011337	6.22716	N=212
	Between		0.5169143	0.739418	4.451647	n=47
	Within		0.3766239	-2.497145	3.607903	T=4.5
AGE	Overall	57.00472	26.12683	8	152	N=212
	Between		25.89469	8	152	n=47
	Within		0.4072797	55.00472	59.00472	T=4.5
SZE	Overall	3.55e+07	3.71e+08	45254	5.40e+09	N=212
	Between		1.65+08	50968.6	1.14e+09	n=47
	Within		3.29e+09	-1.04e+09	4.30e+09	T=4.5
RSK	Overall	0.3980358	0.2879798	0.00002	1.2266	N=212
	Between		0.205919	0.006647	0.706139	n=47
	Within		0.1996487	-0.2164381	1.016036	T=4.5
CIN	Overall	0.6279688	7.677573	-7.4965	111.1172	N=212
	Between		1.076828	-0.1031588	2.483807	n=47
	Within		7.61165	-6.765372	109.2614	T=4.5

N refers to overall panel observations (nXT), n is the cross-sectional observations (firms), T is the time frame.

The mean board size is about eight with the minimum and maximum being three and thirteen respectively. There is also some amount of variation in this ratio across the cross-section of firms as seen in the standard deviation between the cross-sections.

With board composition, the mean ratio of 17.7% suggests that more insiders serve on these boards than outsiders. This also suggests that these boards are relatively less independent. However, the minimum and maximum of 0 and 71.2% respectively are indications of some of the boards being more independent. On average, 17% of the boards are 1-tier board structures, meaning that about 83% of the firms have the critical roles of decision-taking and decision-management embedded in two individual, which augurs well for firm management. The standard deviation of 0.38 between cross-sections shows that these firms are widely dispersed with regard to CEO duality. Most of the firms are doing well with regard to profitability. It is evident that a large number of the firms are highly leveraged and most of them depend on long-term rather than short-term leverage, and these firms, on average, have been operating for the past 57 years. Furthermore, most of these firms are considered relatively risky, as shown by their average earning variability of 40%, though the minimum risk measured is 0.00002.

5.4.2   Discussion of Regression Results

In Table 5-2, the results of the Hausman specification test do not allow us to reject the null hypothesis that the difference in coefficients is not systematic. Given such results, the preferred model is the Random-effects GLS because it is consistent and efficient.

The study shows a positive correlation between short-term and long-term debts and total leverage and corporate board size, contradicting the findings of Berger *et al.* (1997) who showed that firms with large boards employ less leverage. The positive relationship between the board size and leverage suggests that larger boards employ high debt policy to raise

corporate value. This may be due to the apparent lack of consensus building due to the size of the board resulting in weaker corporate governance. This is consistent with studies by Jensen (1986), Wen *et al.* (2002) and Abor (2006), thereby confirming the argument by Anderson *et al.* (2004) that the cost of debt is lower for larger boards probably due to the fact that creditors view these firms as essentially having effective monitoring of their operations. Again, this may be due to the fact that large boards, which are relatively more entrenched due to monitoring by regulatory bodies, target higher leverage to enhance corporate value.

The results of the study show that the independence of the board achieved through the appointment of more outside directors is negatively related to short-term leverage but positively related to long-term and total leverage. While the relationship between short-term leverage and the independence of the board contradicts other studies, the positive relationship between board independence and both long-term and total leverage confirm earlier findings by Jensen (1986) and Berger *et al.* (1997) that firms with higher leverage tend to have more outside directors which also supports the argument by Pfeffer (1973) and Pfeffer and Salancick (1978). They showed that when a firm has more external directors, it enhances the firm's ability to protect itself against external environmental uncertainties among others, and this increases the ability of the firm to raise funds or increase its value. It must however be pointed out that board independence is insignificant in explaining both long-term and total leverage.

The study shows that agency costs rise when a CEO serves as board chairman and this discourages lenders to invest in such entities leading to a lower leverage ratio. The finding of

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the study is consistent with earlier findings by Forsberg (2004) that a two tier leadership structure results in a higher debt/equity ratio. Though the study shows that it has a positive impact on long-term leverage when a CEO serves as board chairman, the result is not significant. The result for short-term leverage is highly significant compared to total leverage buttressing the argument that one person occupying the two positions leads to conflict of interests and higher agency costs thereby discouraging investors.

The control variables in the regression also showed signs that are consistent with standard capital structure theories. Firms that generate internal funds largely tend to avoid employing more debt. This is basically because while profitable entities may have better access to debt finance, the demand for debt finance may probably be lower if retained earnings are adequate to finance new investments according to the pecking order theory. The negative effect of risk means that below-average performers tend to be less leveraged. That is, firms with more risk exposure tend to control risk by reducing financial risks and therefore employ less debt. This is due to the fact that such firms find it difficult to sustain financial risk. Age, as a measure of reputation, is also positively related to short-term leverage but insignificant in determining both long-term and total leverage. However, evidence concerning the size of the firm appears to be inconclusive in determining a firm's leverage. While, it is positively related to short-term leverage, it is negatively and significantly related to both long-term and total leverage. This is because large firms are more diversified and thus are capable of employing higher leverage. Again, lenders are more willing to support large firms because of the perception of the existence of lower risk levels as against small ones. However, the findings of the study suggest that firms with capacity to employ debt may use less debt primarily as a result of their ability to generate enough internal funds as shown by the

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profitability and risk variables. Surprisingly, firm growth rate does not influence a firm's ability to employ debt irrespective of the maturity period.

Table 5-2: Regression Results (Random Effects Estimation)

Variable	Short-term Leverage (Random Effect Estimation)		Long-term Leverage (Random Effect Estimation)	Leverage (Total) (Random Effect Estimation)	
	DEPENDENT VARIABLE				
	Model 1	Model 2		Model 1	Model 2
Board size	0.024877	0.0230226	0.024663	0.04954	0.0488461
	(2.64)**	(2.20)**	(0.91)	(1.91)**	(1.93)**
Board independence	-0.2768097	-0.3465926	0.5654548	0.2886452	0.2318657
	(-1.95)**	(-2.17)**	(1.38)	(0.74)	(0.60)
CEO duality	-0.1785673		0.0154349	-0.1631324	-0.1656613
	(-4.02)**		(0.12)	(-1.34)	(-1.36)
Firm growth rate	-0.000103	-4.46e-06	0.0000383	0.0000281	-0.1233908
	(-0.47)	(0.18)	(0.60)	(0.47)	(-1.50)**
Profitability	-0.1129504		-0.0061427	-0.1190931	
	(-3.75)**		(-0.07)	(-1.44)	
Risk	-0.3587314		-0.0537259	-0.4124573	-0.3953801
	(-6.09)**		(-0.32)	(-2.55)**	(-2.48)**
Log of firm age	0.0400735	0.0613251	-0.1346571	-0.0945836	
	(1.19)	(1.62)**	(-1.38)	(-1.02)	
Log of firm size	0.0150849	0.023782	-0.0931517	-0.0780668	-0.0789078
	(1.07)	(1.60)**	(-2.28)**	(-2.01)**	(-2.11)**
Constant	0.0589993	-0.3111427	2.434692	2.493692	2.142358
	(0.28)	(-1.45)	(4.02)**	(4.33)**	(4.43)**
R-squared	0.67	0.15	0.06	0.18	0.12
No. of Obs.	212	212	212	212	212
Test of probability	Wald Chi2 (8)=118.54 $[0.0000]$	Wald Chi2 (5)=44.93 $[0.0000]$	Wald Chi2 (8)=13.56 $[0.0940]$	Wald Chi2 (8)=14.93 $[0.0606]$	Wald Chi2 (6)=13.68 $[0.0334]$
Hausman test	Chi2 (8) = 1.66 $[0.9897]$	Chi2 (5)=3.27 $[0.6579]$	Chi2 (8)=2.40 $[0.9664]$	Chi2 (8)=1.26 $[0.9960]$	Chi 2 (6)=1.05 $[0.9837]$

Notes: All regressions include a constant. T-statistics are in parenthesis and Probability values in square brackets. ** indicate significance at 5 percent level

5.5   Conclusion

Corporate governance refers to how corporate entities ought to be run, directed and controlled. It is believed that better corporate governance enhances a firm's profile through better access to finance, lower cost of capital, better performance and preferential treatment from all stakeholders. Of critical importance is the fact that the concept of corporate governance has come to dominate the policy agenda of most developing nations primarily because it has been noted to ensure sustained growth and partly due to the East Asia crisis and the relative lack of corporate governance mechanisms on the African continent. The study looked at corporate governance and its relationship with the financing choices of firms by using data from forty-seven listed firms on the Nairobi Stock Exchange covering the period 1999 to 2003. The Random-Effects GLS panel data regression model was employed and results showed that corporate governance indeed influence financing decisions of firms.

The findings of the study indicate that firms with larger boards employ more debt irrespective of the debt's maturity period to raise corporate value as against equity. Again, the regression results showed that while independence of the board positively affects both long-term and total leverage, it is negatively and significantly correlated with short-term debt and that when a CEO doubles as board chairman, less debt, particularly short-term debt, and, to some extent, total leverage are employed.

In conclusion, therefore, it is recommended that firms should position themselves by strengthening governance structures so as to enhance their outlook and thus enjoy the financial

benefits thereof. With regard to specific policy implications emanating from the findings, the study supports the institution of good corporate governance mechanisms in order to enhance a firm's outlook and therefore be in a capacity to access the financial markets. One of the mechanisms that have been projected as depicting a good corporate governance principle is board independence. Indeed, in South Africa, the King Report makes a sound recommendation in this direction. It is therefore our recommendation, in tandem with others, for example the King Report, that corporate entities should make more use of external directors so as to ensure board independence and send a positive signal to potential investors (debt holders in this case). Perhaps one main policy recommendation that arises out of our findings is the ability to strike a good balance between quality and quantity with regard to board sizes. Since larger boards discourage investors, it is our recommendation that corporate entities should not sacrifice quality for quantity with regard to board appointments. A case in point is that of South Africa. The pursuance of the Black Economic Empowerment (BEE) Policy for instance, should be conducted with a great sense of caution in order not to send wrong signals to the investment community.

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6 THE LINK BETWEEN FIRMS' INVESTMENT OPPORTUNITY SET AND

CORPORATE GOVERNANCE IN AFRICA: EMPIRICAL

EVIDENCE[→]

6.1 Introduction

The performance of corporate governance structures in advanced economies have been examined in great detail especially in the United States and Japan (Shleifer & Vishny, 1997). Claessens *et al.* (2003) have shown that better corporate framework benefits firms through greater access to financing and better performance among others. They argue that weak corporate governance results in poor firm performance and is also conducive for macroeconomic crises. Donaldson (2003) showed that good corporate governance is also important for increasing investor confidence and market liquidity. In spite of the importance of corporate governance and its related merits in running the affairs of a modern corporate entity, less empirical work has been carried out in developing economies in general and on the African continent in particular. In these developing economies, markets are also noted to be dominated by large business groups (Khanna, 2000). Corporate governance is gaining ground in Africa and has continued to dominate debates and development policies though little empirical work exists to substantiate such importance. The continent is generally characterised by weak governance systems and the relative poor performance of corporate Africa has been attributed largely to weak governance

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systems. Studies have indicated that the level of corruption at the political level in Africa is closely linked with corporate governance. This is because, it is argued that "a corrupt system influences corporate governance through its impact on calculus of crime and punishment as well as on the credibility of the apparatus for enforcing corporate rules and regulations" (Ayogu, 2001). The problem with Africa is certainly not a lack of laws, but has always been the lack of power to enforce corporate regulations and laws for a better system (Ayogu, 2001). As stated previously however, South Africa could be singled out as having well-developed corporate governance structures. A sustained research into corporate governance and its linkage with various dimensions of corporate behaviour is the needed recipe for understanding and appreciating corporate governance on the continent.

It should be pointed out that while there is a growing amount of literature on corporate governance law and the functioning of capital markets around the world[7], a study by Ayogu (2001) is about the only well-documented paper on corporate governance in Africa. Ayogu (2001) focussed on the examination of corporate governance indicators involving legalities and regulatory matters in a selected cross-country study. The focus of the current work however, is not directly on examining the functioning of corporate governance in disciplining poorly performing managers but on investigating how corporate governance structures of firms affect their investment or growth opportunities in selected African countries. The major contribution of this paper to the link between corporate governance and firm behaviour is the dimension of both sector and country specific effects on the linkage between firm growth opportunities and corporate governance.

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[7] Reference: La Porta *et al.* (1997, 1998, 1999) and Johnson *et al.* (2000).

The rest of the paper is organised similarly to previous chapters: section two looks at the literature; section three focuses on data and methodology; section four discusses empirical findings; and section five concludes the paper.

6.2   Literature Review

The study of corporate governance has its foundations in the agency theory which stems from separation between ownership and control in running the affairs of corporate entities. Such situations breed costs related to agency theory. This is more pronounced in that modern corporations are characterised by owners (principals) who employ managers (agents) in controlling capacities to steer corporate affairs. Ceteris paribus, these agents are expected to pursue objectives that are in line with that of the owners. However, agents, more often than not pursue their own set of objectives and these most of the time are in conflict with owners' objectives (Jensen & Meckling, 1976). Hence, agency theory demonstrates that the presence of different types of corporate governance controls is determined by the cost of numerous and often conflicting objectives and information asymmetry. In this environment, the role of corporate governance is regarded as one of cost mitigation through discouraging managers from the pursuance of objectives that are deemed detrimental to firm value maximisation. Therefore, corporate governance is a mechanism designed to ensure that owners' objectives are aligned with that of managers in order to ensure that there is minimal deviation (Fama & Jensen, 1983). Corporate governance, once again, is identified as an important mechanism in promoting monitoring and incentives in order to reduce agency costs (Brickley *et al.,* 1997; Conyon & Peck, 1998; Jensen & Meckling, 1976; Singh & Harianto, 1989).

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Though, some studies have looked at corporate governance and firm performance, the results have been largely inconclusive. Most of these studies have concentrated on performance measures such as Return on Assets (ROA), Return on Equity (ROE), Tobin's q, etc. A probable explanation for the weak and conflicting results may be the failure of these studies to recognise that the relationship between corporate governance controls and firm performance could be influenced indirectly by a firm's organisational environment. The argument is that corporate controls may not be effective for every firm and that the environment within which a firm operates rather could be more influential on its governance and control structures. In this study we therefore use a firm's investment or growth opportunities as a proxy for the organisational environment within which it operates in line with Hutchison and Gul (2004). This is not to suggest that that is the only viable proxy for organizational environment is growth opportunities. there could be others, but for the purposes of this study we would want to concentrate on growth opportunities.

From the foregoing analysis, the theoretical underpinning of the current study is unique in that the study does not necessarily look at corporate governance and firm performance, but examines how governance structures impact on a firm's investment or growth opportunities as its organizational environment. Indeed, the relationship between corporate governance and firm performance is open to criticism due basically to endogeneity problems. This emanates from the fact that the link between performance and corporate governance could be bi-directional. Performance could impact on governance and governance could also impact on performance. In advancing our argument, we make reference to studies by Hutchinson and Gul (2004) which show that corporate governance variables have an impact on a firm's growth opportunities and firms with more growth opportunities are more difficult to monitor and vice versa.

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Agency theory posits that corporate governance controls are linked to information asymmetry and the incidence of information asymmetry is higher for growth firms because managers have private information about the value of future projects and their actions also are not easily read by shareholders. Thus, higher shareholder/manager agency costs are associated with high growth firms and such firms therefore develop a greater need for corporate controls (Hutchinson & Gul, 2004). Smith and Watts (1992) have shown that the observability of managers' actions decreases along with the increase of investment opportunities of a firm. This is explained by the fact that the value of growth options is determined by discretionary expenditure by managers while assets in place do not require such investment (Gaver & Gaver, 1993). Resulting from this, growth firms employ certain control mechanisms to motivate and compensate managers some of which involve corporate boards.

6.2.1   The Investment Opportunity Set and Board Monitoring

The few studies that have tried to explore this area have used three main independent variables, namely board monitoring, management shareholding, and managerial remuneration in explaining the growth of a firm.

Several studies have investigated the usefulness of a corporate board as a monitoring device as such boards communicate shareholders' objectives and interests to managers. It is argued by Munter & Kren (1995) that external board membership promotes proper management supervision and therefore limits managerial opportunism. In this regard, empirical research has shown that a greater proportion of non-executive directors on a board is likely to enhance decision-taking that is in the interest of external shareholders thereby enhancing firm growth

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(Brickley *et al.*, 1997; Conyon & Peck, 1998; Tosi *et al.*, 1997; Weisbach, 1988). However, managerial hegemony theory challenges this argument and stipulates that boards essentially are passive instruments owing greater allegiance to the managers who appoint them, and that such boards usually lack knowledge about the firm and constantly fall on executives for information, arguably for their own efficiency (Coles *et al.*, 2001). They further argue that a firm's investment opportunities are firm specific defined comparable to issues such as managerial skills (Anderson *et al.*, 1993). Following from that, it is believed that it is a difficult task to monitor managers' actions in growth firms. The point is, it is relatively difficult to determine whether the growth of a firm actually is a result of managers' actions or whether it is due to external factors. Control variables are introduced in the regression model to address an issue of this nature.

The studies that have investigated the link between board monitoring and firm investment opportunities have often led to inconclusive and conflicting results. Bathala and Rao (1995) and Hutchinson (2002) found a negative relationship between the proportion of outside directors and firms' growth rate. However, Hossain *et al.*, (2000) found that the proportion of outside directors on a board is positively related to a firm's investment opportunities. Anderson *et al.* (1993) also show that a firm with higher growth or investment opportunities incurs higher monitoring costs in terms of director and auditor fees. Again, in some instances it is asserted that where growth firms have a higher proportion of executive directors on the board, managers have greater discretion in terms of investment opportunities which is a product of managers' discretionary expenditures (Hutchison & Gul, 2004). Under such circumstances it is probable that both shareholders and debt holders will demand a higher proportion of non-executive directors to serve as a monitoring device on executives and this serves as moderation on agency costs. Non-

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executive director dominated boards are deemed to protect the investments of both debt holders and shareholders.

In this study, not only do we investigate the proportion of non-executive directors to the board size, we also employ broad characteristics of corporate boards that impinge on their monitoring ability. In this regard, the paper makes a very significant contribution to the literature by testing the agency theory empirically. Again, due to the lack of studies of this nature on the African continent, the study seeks to shed more light on matters of corporate governance in Africa.

6.3 Data and Methodological Issues

6.3.1 Sample

Data for the study is collected from 103 firms listed on selected stock exchanges in Africa. Countries selected for the study include Ghana, Nigeria, South Africa and Kenya and the study covers the period 1997 to 2001. The data includes both financial and non-financial. For the financial data, INET-Bridge and the various stock exchange fact books served as the main sources and this was supplemented with the administration of a questionnaire for some of the governance variables. Firms selected were on the basis of data availability and with due regards to response to the questionnaire. Sampled firms represented the Industrial, Manufacturing, Mining, Agricultural and Services sectors and in defining what constitutes these sectors we largely depended on the classifications given by the various stock exchanges. We are not unaware of the possibility of non-uniform classification which could pose a problem with regard to the analysis and results. We are of the opinion, however, that such differences are marginal and thus have

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little impact on compromising the validity of our results. The finance sector is omitted consistent with studies on corporate governance (Faccio & Lasfer, 2000).

6.3.2   Variable Description and Justification

Though previous studies have looked at this relationship focussing on proportion of non-executive directors, managerial shareholding and managers' remuneration, data on managerial shareholding and managers' remuneration could not be obtained as respondents were unwilling to disclose such information. In this study therefore, we dwell largely on board characteristics, other corporate governance mechanisms, and country and sector categorical instruments as the main independent variables.

Dependent Variable

Our dependent variable is a firm's investment or growth opportunity which could be measured by the ratio of market to book value of assets. Kallapur and Trombley (1999) show that among the commonly used proxies, the ratio of market to book value of assets is the most highly correlated with future growth of firms. Hence studies by Anderson *et al.* (1993), Baber *et al.* (1996), Gaver and Gaver (1993), Gul (1999), Hossain *et al.* (2000) and Skinner (1993) have all used price-based proxies because these tend to strengthen the robustness and sensitivity of regression results. However, in order to differentiate this chapter from previous chapters, we employ the ratio of R&D to sales as a proxy for growth opportunity. This is equally consistent

with studies by Kallapur and Trombley (1999), Anderson *et al.* (1993), Baber *et al.* (1996), Gaver and Gaver (1993), Gul (1999), Hossain *et al.* (2000) and Skinner (1993).

Independent Variables

While studies have shown that effective monitoring of the board depends mostly on the ratio of non-executive members on a corporate board, we argue that the effective monitoring of a board depends to a large extent on broad board characteristics and other corporate governance indicators. In this study therefore, in addition to the proportion of non-executive board members, we also employ board size, CEO duality, and CEO tenure as our independent variables. The board size is measured by the number of board members (and by extension this in part measures expenditure or fess on the board); CEO duality is a dummy variable and takes the value of 1 when a CEO serves as board chairperson and of 0 where two people occupy the two positions of CEO and board chairman; we also measure CEO tenure by the number of years of CEO service. Both country and sector are categorical variables. With country, we assign the following numerical values (South Africa = 0; Ghana = 1; Nigeria = 2; Kenya = 3) whiles we assign the following numerals to the sectors (Industrial = 0; Mining = 1; Manufacturing = 2; Agricultural = 3; Services = 4). The implication of the above is that South Africa is the reference point for comparative analysis while the Industrial sector is the reference point for comparative analysis to ascertain country and sector specific effects in our regression.

Control Variables

We acknowledge our inability to fully model growth opportunities of firms and therefore we employ control variables in our model. Smith and Watts (1992) show that firm size is positively related to various firm characteristics, debt covenants, dividend policy and management compensation. We use number of employees as a measure of size and this is logged to normalise it in the regression. We also include leverage as a control variable because it represents external corporate governance control. For instance, debtholders who are interested in safeguarding their investments in a firm will monitor the firm especially when the capital structure becomes more debt oriented. We measure leverage as the ratio of total debts to total book value of assets. Skinner (1993) posits that since book values are used to write debt contracts, these measure proxies for debtholder and shareholder conflicts more accurately than market-based measures. The debt ratio shows how firms choose to finance their operations. We also include ROA as profitability measure of the firm as another control variable. Indeed, to enhance the robustness of the model, this variable is captured as a lag variable in order to help capture its dynamic adjustment. Finally, we include firm level risk, measured by earnings volatility as another control variable.

Since this is a cross-country and cross-sector study, we realise that specific countries and sectors will have specific effects on investment opportunities of any firm. Thus, we include both country and sector categorical variables to account for these specific effects in our model.

6.3.3   Analytical Framework and Empirical Model Specification

Our analysis is carried out in a panel data setting due essentially to its advantage of allowing for more data points. The basic panel data regression model is given by

$$y_{it} = \delta + X'_{it}\alpha + u_{it} \text{, where } i = 1,..............................N; t = 1,..............................T \qquad 1$$

In this basic model, i denotes the cross-sectional dimension and t represents the time dimension. δ is a scalar, α is a $Kx1$, and X_{it} is the *ith* observation on K explanatory variables. In this case, there is a one-way error component model for the disturbances with

$$u_{it} = \mu_i + v_{it} \qquad\qquad 2$$

In estimating the basic model, the behaviour of the components of the error term (equation 2) determines the choice of estimation technique. In order to deal with the situation as to which specification to employ in estimating the regression equation, Hausman (1978) suggested a test to check whether the individual effects are correlated with the explanatory variables (X_{it}). Under the null hypothesis of orthogonality, that is, no correlation between individual effects and explanatory variables, both random effects and fixed effects estimators are consistent, but the random effect estimator is efficient while that for fixed effects is not. Under the alternative hypothesis that individual effects are correlated with the explanatory variables, the random effects estimator is inconsistent while the fixed effects estimator is consistent and efficient. Greene (1997) indicates that, under the null, the estimates should not differ systematically. Thus, the test to choose between Fixed or Random Effects is based on a contrast vector H:

$$H= [b^{GLS}-b^{w}]'[V(b^{w})-V(b^{GLS})]^{-1}[b^{GLS}-b^{w}] \qquad 3$$

We carry out the Hausman specification test in our estimations to determine the appropriate estimation method to employ and results reported in subsequent tables.

6.3.4   Empirical Model Specification

Our model to be estimated was thus given as

$$InvOpp_{it} = \delta + GovXtics'_{it}\alpha_0 + Controls_{it}\alpha_1 + Country_i\alpha_2 + Sector_i\alpha_3 + u_{it} \qquad 4$$

where $InvOpp_{it}$ is the Investment or growth opportunities set for firm i at time t; $GovXtics_{it}$ is the governance variables for firm i at time t; $Controls_{it}$ represents the control variables for firm i at time t; $Country_i$ is a categorical variable measuring country specific effect; $Sector_i$ is also a categorical variable measuring sector specific effects; u_{it} is the error term; and $i = 1,..........................103; t = 1,................................5.$

6.4   Empirical Findings

6.4.1   Descriptive Statistics

Table 6-1: Summary Statistics

Variable	Observations	Mean	Std. Dev.	Min.	Max.
Investment or Growth Opportunity set (ratio of R&D to Sales)	388	0.2152213	0.3798653	0	1.35
Board Size	388	9.224227	3.409779	3	23
NED	388	0.419022	0.259989	0.05	0.846
CEO duality	388	0.193299	0.3953953	0	1
CEO tenure	388	3.510309	1.585593	2	8
Profitability	388	0.1268295	0.1458879	-0.426	0.68
Firm risk	388	0.0496657	0.0712374	1.00e-05	0.68973
Firm size	388	9873.709	36954.1	20	303098
SDR	388	0.2917814	0.2146533	0.0013022	0.9159
LDR	388	0.3722482	0.2076858	0.001	0.8736
Leverage	388	0.6636894	0.2410705	0.006	0.991

Note: SDR and TDR are Short-term and Long-term leverage respectively. NED is the ratio of non-executive directors to board size

Table 6-1 shows the summary statistics of both the dependent and independent variables. The distribution of the 103 companies is as follows; 31 are in the Industrial sector, 25 in the Manufacturing sector, 24 in the Mining sector, 10 in the Agricultural sector, and 13 in the Services sector. The distribution among the countries is uneven, with South Africa and Nigeria contributing the largest share of firms in the Mining sector. The descriptive statistics show that most of the firms have experienced modest growth of about 21.5 percent per annum. While some did not experience any growth at all at some points, the standard deviation of 0.38 rather suggests that growth is less dispersed among the sample firms. These firms are doing well with regard to profitability with a mean profit of about 13 percent. The size of corporate boards in the sample is highly dispersed with a minimum of three and a maximum of 23 board members. The high standard deviation of about 3.41 lends credence to the above. Again, there is a high variation between and within firms with regard to the board size, but most the firms in the sample operate

with a board of about nine members. The descriptive statistics also show that most of the boards have more executive directors than non-executive directors. This is indicated by a mean value of 0.42, suggesting that about 58 percent of all boards are made up of executive directors. According John and Senbet (1998), the above statistics show less independent corporate boards. However, some are very independent with about 84.6 percent of the members being non-executive. At the tip of most governance structures in the sample, there is a clear separation of the personalities of board chairman and CEO and their functions. The mean value of about 19 percent indicates that of the 103 firms, about 19 percent have both CEO and board chairman positions embedded in one person. These CEOs serve a term ranging between two and eight years with most of them serving a term of about three-and-a-half years. Using the number of employees as a proxy for firm size, there is wide variation between and within firms. Most of the firms are heavily dependent on debt financing for their operations as against equity financing and this is driven by long-term debt.

6.4.2   Discussion of Regression Results

In Table 6-2, our regression results show that the size of the board has a positive impact on the growth opportunities of firms. It indicates that the larger the size of the board, the better the chances of the firm growing. This could be due to the fact that a larger board effectively monitors and scrutinises management and hence ensures that decisions including those regarding expenditure are taken in the interest of shareholders. All things being equal, a larger board by implication means larger expenditure on the board. In that regard, the finding supports studies by Anderson *et al.* (1993) who show that firms with higher growth or investment opportunities incur higher monitoring costs in terms of director and auditor fees. The ratio of non-executive

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directors to board size gives the right signal, indicating that the presence of more non-executive directors on a corporate board safeguards the interests of shareholders and promotes firm growth. This confirms studies by Hossain *et al.* (2000) who found that the proportion of outside directors on a board is positively related to a firm's investment opportunities, and also Munter and Kren (1995) who indicated that external board membership promotes proper management supervision and therefore limits managerial opportunisms. This variable however is not significant. When a CEO doubles as the board chairman, it increases agency costs and impact negatively on investment opportunities of a firm as the results show. Again, this variable is insignificant in explaining firm growth opportunities. The results also show that when a CEO has a longer tenure in office, it enhances firm growth. This could be explained by the fact that, when a CEO serves for a longer term, the CEO is motivated to see through decisions to their logical conclusions, coupled with the benefit of having job security, stability and focus. This enhances commitment and dedication to the firm's objectives, thereby improving shareholders' value. The control variables invariably showed the expected signs with the exception of firm size which showed a negative relationship with firm growth. The implication however, is that size may not translate into opportunities if pragmatic decisions and actions are not taken.

Table 6-2: Regression Results Dependent variable: Investment Opportunity Set (ratio of R&D to Sales)) (Fixed Effects Estimation)

Regressors	
Board size	0.0311173
	(4.55)**
Ratio of NEDs	0.0805285
	(0.97)
CEO duality	-0.0584821
	(-1.18)
CEO tenure	0.0460997
	(3.67)**
Profitability (ROA)	0.43432
	(3.15)**
Firm level risk	-0.4555231
	(-1.73)**
Leverage	0.1104545
	(1.23)
Log of firm size	-0.0291448
	(-2.18)**
Constant	-0.0940997
	(-0.80)
Adjusted R-squared	0.1622
No. of observations	388
Test of probability	$F(8, 375) = 9.07$
	$[0.0000]$
Hausman specification test	$Chi2 (8) = 13.0$
	$[0.1120]$

Note: The regression includes a constant. T-statistics are in parenthesis and Probability values are in square brackets. ** indicates significance at 5 percent level.

Table 6-3 shows the regression results for both country and sector specific effects on firm investment and growth opportunities. Using South Africa as the reference point, the results show that firms in South Africa have higher investment or growth opportunities more than Ghana, Nigeria and Kenya. This was expected because of the developed nature of the South African corporate governance structures. While firms in Ghana grow more than those of Nigeria, firms in Kenya are the worst performers with regard to growth of firms. This implies that whereas firms may be growing generally, different countries with different governance mechanisms will lead to specific behaviour and response of firms. The other probable implication is that, while South Africa leads the continent in terms of corporate governance and dealing with agency costs,

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Ghana's corporate governance structures are better than those of Nigeria, and Nigeria's better than those of Kenya.

Using the industrial sector as the reference point, the results show that firms in the other sectors have higher investment and growth opportunities and the mining sector particularly is dominant, followed by the Services, Manufacturing and the Agricultural sectors respectively. This may be due to the fact that most of the mining firms in Africa are owned by foreign multinational organisations. They therefore are likely to be influenced by global governance structures in reducing agency costs and maximising shareholders and debt holders' interests.

Table 6-3: Regression Results Country and Firm Specific Effects (Random Effects GLS Regression) Dependent Investment Opportunity Set (MTBV))

Variables	Country Effects	Sector Effects
Ghana	-0.2502158	
	(-4.24)**	
Nigeria	-0.3360478	
	(-6.02)**	
Kenya	-0.4793645	
	(-8.36)**	
Agriculture		0.0295227
		(0.49)
Manufacturing		0.0362727
		(0.76)
Mining		0.4040287
		(7.09)**
Services		0.0490973
		(0.87)
Constant	0.5700158	0.1940606
	(11.07)**	(6.22)**
R-squared	0.1423	0.1267
No. of Observations	388	388
Test of Probability	Wald Chi2 (3)=73.10	Wald Chi2 (4)= 55.58
	[0.0000]	[0.0000]

6.5   Conclusion

The study set out to examine corporate governance mechanisms, largely along board characteristics, and how they influence firm investment or growth opportunities. The study started from the premise that the performance of any firm may be largely determined by the

organisational environment and not necessarily just by the governance structures that are in place. The need for the investigation was strengthened by the fact that corporate governance is gradually taking shape on the African continent and the examination of its relationship with various firm characteristics is not only appropriate but overdue. Our results show that firms with investment or growth opportunities indeed employ large boards (high board and auditor fees), have longer CEO tenure and are profitable. The study also showed that both country and sector specific effects influence firm response to existing governance structures and towards growth. While firms in South Africa exhibit relatively higher growth rates, the study revealed that governance structures in Ghana may be better than in Nigeria and Kenya, and that firms in the mining sector dominate with regard to growth opportunities.

While the results have implications for policy setters by suggesting that firms with higher growth rates employ larger boards and give CEOs longer tenure, it also shows that corporate governance is important in affecting a firm's growth, thereby disproving the managerial hegemony theory which posits that boards are passive instruments owing allegiance to managers who employ them and therefore may not affect a firm's behaviour. Though, we acknowledge the fact that corporate governance embraces a broader set of variables, data limitations restricted us. In spite of this limitation, the validity of our findings is not compromised.

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7   CORPORATE BOARD DIVERSITY AND PERFORMANCE OF

MICROFINANCE INSTITUTIONS IN GHANA: THE EFFECT OF GENDER[γ]

7.1   Introduction

The concept of microfinance has gained grounds and has been regarded as a poverty reduction tool especially on account of the success story of the famous Grameen Bank in Bangladesh. Many countries have in the past used and are currently using microfinance as a poverty reduction strategy. Countries such as Ghana, Malawi and Uganda, to mention but a few, are known to have embraced the concept with alacrity. It must also be pointed out that, not everyone sees microfinance as a development and poverty reduction tool. Whiles one strand argues that microfinance has been very positive with regards to economic and social impact (Holcombe, 1995; Hossain, 1988; Khandker, 1998; Otero & Rhyne, 1994; Rameyi, 1991; Schuler *et al.*, 1997), others contend that such optimism should be expressed with a reasonable degree of caution (Adams & von Pischke, 1992; Buckley, 1997; Montgomery, 1996; Rogaly, 1996; Wood & Sharrif, 1997). In between these strands of thoughts is the school which contends that, though microfinance impacts positively on the poor, it does not assist the poor at all times (Hulme & Mosley, 1996; Mosley & Hulme, 1998). In spite of these misgivings, the overwhelming success story of the Grameen Bank points to a concept that has a huge potential for the improvement of the livelihoods of the productive poor. It is in this regard that we deem it imperative to examine

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the relationship that exists between governance structures in these institutions and ascertain how these structures impact on institutional performance. Findings of the study do not only aim at fine-tuning governance in Microfinance Institutions (MFIs) in terms of policy direction, but equally important to ensure that collapse of MFIs as a result of governance is forestalled so as not to dent the critical process of poverty reduction and development.

Microfinance comprises the provision of loans and other financial services to the productive poor who cannot access formal financial intermediation. Indeed, microfinance has evolved primarily as a consequence of the efforts of individuals and agencies committed to the idea of ensuring that the poor have access to some form of credit. The industry is noted to be growing rapidly and how they are governed therefore matters. Practitioners in the industry have recognised that good governance is an important element in the success of MFIs (Campion, 1998; Rock *et al.*, 1998). In spite of this observation, only a few studies have focussed on governance and the examination of the linkage between various governance mechanisms and performance (McGuire, 1999). Moreover, these studies, such as that by Hartarska (2004), have concentrated primarily on European MFIs.

Due to their increasing role in controlling significant resources, governance issues in MFIs are not only essential but also an important variable in the bid to promote the well-being of the poor. In the not-too-distant past, waves of corporate scandals in well-structured corporate entities in developed countries have been a wake-up call pointing to the need for improvement in governance practices even in well-regulated markets and industries with established mechanisms for control. Growing rapidly with varying degrees of diversity, the Microfinance sector in Ghana has moved from the predominantly non-regulated ROSCAS to a wide variety of regulated formal

and semi-formal institutions. MFIs in Ghana include Rural and Community Banks (R&CBs), Credit Unions (CUs), Savings and Loans Companies (S&Ls), Rotating Savings and Credit Associations (ROSCAS), Regular Savings and Loans Associations (RESCAS) and some Commercial and Development Banks. While the Banks and mostly the formal and semi-formal MFIs are regulated, a considerable number of the MFIs are not regulated.

Most MFIs in Ghana are male dominated in terms of governance and leadership. However, with regard to the performance of MFIs, it is believed that the presence of women enhances depth of outreach and sustainability. Of late, arguments around governance reforms have been geared towards the importance of gender diversity, especially in the boardroom, thus, the issue of gender diversity has become a central theme of many recent governance codes (Higgs, 2003; Tyson, 2003). It is argued that boards could enhance their effectiveness by tapping broader talent pools for their directors and that a more diverse board is likely to have better relations with other stakeholders such as customers, suppliers and employees (Ellis & Keys, 2003).

Though, governance has assumed an increasing importance for MFIs, there is some justification for the apparent lack of research on the effect of MFI governance on performance. In MFIs, performance data are largely deemed proprietary and are difficult to obtain. In spite of the fact that MFIs are mostly funded from donor and public funds, the practice has always been to withhold performance information that is considered sensitive from the public.

Corporate governance and having diversity on a firm's board has been given some attention in recent times. The topic has received comments not only from academics but also from practitioners and especially in the press. One must point out that a considerable volume of

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discussion has centred on the difficulties women encounter in trying to get promotion to senior management levels. This phenomenon is normally referred to as the glass ceiling effect. Of late, however, most of the studies are devoted to issues and matters relating to women holding management portfolios and having a visible presence in corporate boardrooms (Carter et al, 2003; Bilimoria & Piderit, 1994; Kesner, 1998; Daily *et al.*, 1999).

Boards are important in the management of MFIs because of the relatively limited role of external market forces. Like other sectors of the Ghanaian economy, fewer women hold senior executive positions in MFIs. Again, most of the boards in corporate organisations, including MFIs, are also dominated by male presence. Does this have any implication for performance? Studies on MFIs in Ghana have not looked at governance and how it affects performance. The broad objective of this study is to investigate board diversity by highlighting the gender angle and examining its impact on the performance of MFIs with the use of data from Ghana. The current study seeks to extend board characteristics by incorporating gender and to examine whether having a female CEO and a board structure dominated by females is positively or negatively related to performance. Not only will the study add to the existing literature on governance in MFIs, but also contribute towards reshaping the governance of MFIs.

The rest of the paper is organised as follows; Section 2 reviews the literature; Section 3 looks at data description and methodology; Section 4 discusses the empirical findings and Section 5 draws conclusions emanating from the findings.

7.2   Literature Review

In the domain of microfinance, governance is defined as "the mechanisms through which donors, equity investors and other providers of funds ensure themselves that their funds will be used according to the intended purpose" (Hartarska, 2004). This definition stems from the definition given by Shleifer and Vishny (1997) that corporate governance is the mechanism through which shareholders assure themselves that they will receive maximum return on their investment. The importance of control mechanisms is crystallized in the existence of conflict of preferences and objectives between managers as agents and providers of funds as principals. This is what is referred to as agency cost. In this context, the principal is regarded as the residual claimant of the firm's wealth (Jensen & Meckling, 1976). Thus, corporate governance is put in place to minimise agency cost through aligning the objectives of principals and agents. However, MFIs have unique characteristics that complicate the study of their governance. This is because, apart from MFIs meeting the objective of operational sustainability, they also need to ensure substantial outreach by serving poor clients.

One must note that the key elements of an effective governance structure are ownership (this involves both institutional and managerial), board size, board composition and its structure, CEO characteristics and board members remuneration, auditing, information, and the market for corporate control (Keasey et al 1997). Indeed, corporate boards are primarily put in place by shareholders to serve as a check on management and also to provide direction and guidance in the form of advice. In the corporate governance literature, the degree of board independence is measured by the proportion of non-executives on the board (John & Senbet, 1998). In this regard, the more independent outsiders there are on a board, the more the board is viewed as

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playing an effective monitoring role. However, the linkage between board independence and performance has been largely inconclusive (Yermack, 1996; Eisenberg *et al.*, 1998; Fama & Jensen, 1983; Lipton & Lorsch, 1992). Corporate governance has been identified to involve all the processes and mechanisms that a firm puts in place to ensure that agency costs are reduced within the context of the famous principal-agent paradigm.

Though, there has been consensus on the importance of board diversity and the role of gender in managing business entities to enhance performance, organisational scholars have also pointed out that diverse top management teams may disagree more (Eisenhardt *et al*, 1997) and thus may have a negative impact on performance. The argument is that the effectiveness of a corporate board does not necessarily depend on the number of women there are on the board. For instance, it is argued that increasing the number of female directors on a board and thereby making it highly diversified may require extra mechanisms to ensure cooperation and harmony among directors. This is again supported by the fact that heterogeneity in groups can increase conflict leading to slower decision making (Blau, 1977). It is also posited that in spite of the fact that a diversified board has the opportunity of benefiting from diverse opinions and reducing complacency in the process, this can only be achieved when there is an increased interaction among team members. This is to ensure the curtailment of a potential conflict arising out of prolonged disagreements as a result of entrenched positions and blocks. Goodstein *et al.* (1994) also stress that more diverse boards may require relatively more time to make decisions. This has the tendency of stifling progress and productivity.

In sharp contrast to the above position, Adams *et al.* (2004) in their study on gender diversity in the boardroom showed that female directors have fewer attendance problems at board meetings

than their male counterparts suggesting that diverse boards could be more effective and productive than homogenous boards. In one of their findings, they indicate that gender composition plays an important role in organisation design for corporate boards. For instance, they show that Tobin's q as a measure of firms' value is positively and significantly correlated with the number of women on corporate boards and that higher market valuation is associated with more women on corporate boards supporting an earlier assertion by Carter *et al.* (2003). There have been several arguments in favour of having more women on corporate boards. Women, it is believed, could add value by bringing different perspectives, experiences and opinions. Others have also argued that women generally have higher expectations in terms of their responsibilities as directors which could influence the board's effectiveness towards productivity (Fondas & Sassalos, 2000). With regard to Microfinance, policies to promote gender diversity in governance have been deemed appropriate.

This study thus uses unique data on Ghanaian MFIs to ascertain whether board diversity affect performance.

7.3   Data and Methodological Issues

7.3.1   Data and Variable Description

Panel data covering a ten-year period from 1995 - 2004 was used for the study. The performance variables are obtained from the annual financial reports of the MFIs, while most of the governance variables are obtained through the administration of a questionnaire.

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Dependent Variable

Performance is measured by annual return on assets (ROA) which is a standard finance literature measure of performance. It shows how management of an entity has been able to turnover assets of the organization over-one-year. To a large extent, ROA also deals with operational sustainability of these institutions.

Explanatory Variables

The size of the board

The size of the board is measured by the number of board members as has been done by many authors such as Hermalin and Weisbach (1999, 2002) and Jensen and Meckling (1976). In their various studies, the size of the board has been seen to have an inverse relationship with firm performance. Thus, it is expected that the size of the board would have an inverse correlation with performance.

The independence of the board

We use the independence of the board measured by the proportion of non-executive board members to board size. John and Senbet (1998), for instance, have pointed out that a board is deemed independent if there are more non-executive members than executive members. We expect the independence of the board to have a positive correlation with performance.

CEO's tenure

The tenure of the CEO influences a firm's investment decisions. Studies have shown that a long tenure does not augur well for firm performance as the CEO spends energy and time building an empire to control instead of using time for productive activities (Abor, 2006). We however do not know this sign a-priori.

CEO duality typology

We also measure the extent of agency cost by capturing board structure typology. When a CEO serves as the board chairman, the critical issues of decision control and decision management are embedded in the same person. Studies have pointed out that agency cost tends to be higher in such a scenario, thereby stifling performance (Hermalin & Weisbach, 1991). This is a dummy variable which is equal to unity if the CEO combines as the board chairman and zero if these positions are assigned to different people. We expect that this will have a negative relationship with performance.

Board competence (education level)

The expertise, competence and quality of a firm's board inevitably impacts on performance. The higher the quality, the better the performance. We use the number of board members who have received tertiary education or its equivalent as a proxy for board quality and competence. Hence, we expect this variable to have a positive correlation with performance.

Gender

With gender, we capture whether a CEO is a female and the gender composition of the board. Information concerning female CEOs is captured as a dummy with a value of 1 when a CEO is a

female and a value of 0, otherwise. We measure gender composition as the proportion of women serving on a board to total board size. The signs of these variables are expected to be positive.

Control variables

Due to our inability to adequately model performance, we include MFI's size measured by the asset base, and age of an MFI as a proxy for reputation as control variables.

7.3.2   Analytical framework and Empirical Model specification

The methodological approach used in most previous work examining the impact of corporate governance on firm performance variables utilizes a multiple regression. Thus, following a modified version of the econometric model of Miyajima et al (2003) we estimate the following equation:

$$Performance_{i,t} = \alpha + \beta_1 BodXristics_{i,t} + \sum_{l=1}^{m} \beta_2 Controls_{i,t,l} + \lambda_t + \eta_i + \mu_{i.t} \qquad 1$$

Where **Performance** represents ROA of a MFI i in time t. **BodXristics** is a vector of explanatory variables and **Controls** is a vector of control variables for firm i at time t. λ_t are time specific effects, η_i are individual firm effects and $\mu_{i,t}$ is the error term. It must be noted that we resort to this model because of its direct applicability with regards to the present study.

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The appropriate technique for estimating the basic model is dependent on the behaviour of the component of the error term, $\mu_{i,t}$ that is;

$$\mu_{i,t} = \varepsilon_{i,t} + v_i \qquad\qquad 2$$

Thus, in carrying out our estimation, we undertake the appropriate test to determine which estimation method to employ. The results of these tests are reported in our regression table.

Table 7-1: Correlation Matrix:
(Showing the level and direction of correlation existing between both dependent and independent variables)

	BDS	BDC	CEO	CET	ROA	GEN	GCPN	AGE	NBG	LOGSZE
BDS	1.0000									
BDC	-0.0022	1.0000								
CEO	-0.1686	0.0962	1.0000							
CET	0.2768	0.0235	-0.0536	1.0000						
ROA	0.0724	-0.0196	-0.0434	-0.0555	1.0000					
GEN	-0.1929	-0.0282	0.2462	0.1860	0.0485	1.0000				
GCPN	-0.0130	0.0113	-0.0500	-0.0989	0.0111	-0.0324	1.0000			
AGE	-0.1635	-0.0592	0.1188	-0.0287	0.0791	0.0672	-0.0414	1.0000		
NBG	0.1036	0.0577	-0.0737	0.2411	-0.0259	0.0191	-0.0634	0.2790	1.0000	
LOGSZE	-0.2320	0.0862	0.0123	0.1860	0.0421	0.1150	-0.0926	0.4493	0.7981	1.0000

Notes: BDS is the board size; BDC is the board independence measuring the proportion of outside board members as a ratio of total board members; CEO is a dummy variable which equals to 1 when the CEO combines as the board chairman and 0 otherwise; CET is the CEO's tenure in office and captures the length of time a CEO serves as a CEO; ROA is the return on assets which is a performance variable and it is measured by total profit before tax divided by the total assets; GEN is a dummy variable which is equal to 1 when a CEO is a woman and 0 otherwise; GCPN denotes gender composition of the board size and it is captured by dividing the total number of women on a board by the board size; AGE of the MFI is calculated by taking the number of years the firm has been in operation using the year of incorporation as the reference point; NBG is the number of board members who have had University education or its equivalent; LOGSZE is the natural log of the asset base of the MFIs representing size of the MFI.

The correlation matrix in Table 7-1 shows that the size of the board is positively correlated with return on assets though the correlation co-efficient is weak. Similarly board independence, CEO duality and CEO tenure have weak and negative correlation with return on assets.

7.4 Empirical Findings

7.4.1 Descriptive Statistics

Table 7-2: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min.	Max.
Return on Assets	520	0.3916346	1.524334	0.06	35
Board Size	520	6.230769	1.826959	3	10
Board Independence	520	0.4771154	0.1221016	0.3	0.7
CEO Duality	520	0.5	0.5004815	0	1
CEO Tenure	520	2.846154	0.7181816	2	4
Women CEOs	520	0.4961538	0.5004667	0	1
Gender Composition	520	0.3738462	0.1530947	0.1	0.7
Log of firm Size	520	14.51752	1.901209	11.77	18.73
Age of Firm	520	17.82692	5.024875	10	41
Board Competence	520	2.884615	1.566187	1	7

Performance of the Microfinance Institutions are widely spread. On the average, the MFIs recorded a return on assets of 39.2%. While the maximum performance was 3,500%, the minimum was 6% indicating a widely spread performance. The standard deviation of 1.52 lends credence to this scenario. This is further buttressed by between and within means of 0.209 and 1.511 across institutions. The institutions studied have also been operating for the past 41 years with the average age standing at about 18 years.

On the average, 6 persons serve on a board of a MFI and a standard deviation of 1.83 coupled with a maximum board size of ten members and a minimum board size of three members suggest that these boards are widely dispersed. It must also be pointed out that on the average three members of every board have had University education or its equivalent.

The maximum number of university graduates serving on any board is seven and the minimum number is one. Combining the mean board size and the number of graduate members suggest that boards of the MFIs are relatively competent.

Most of these boards are deemed less independent shown by the relatively higher percentage of executive board members. The mean board composition of about 48% suggests that about 52% of all boards are constituted by executive members. However, some of the boards are regarded as highly independent with a maximum of 70% membership being non-executive. The boards are however divided equally between scenarios where the CEO serves as the Chairman and where two individuals occupy the positions of Board Chairman and CEO. Thus, 50% of the firms have their CEOs serving as the board chair-persons whiles 50% on the other hand have the two positions of decision management and control embedded in two separate individuals. Most of the CEOs of these MFIs serve a three year term as tenure with the maximum being four years.

The results also show that about 50% of the institutions have their CEOs as women and on average, 37% of all boards is made up of women. However, whiles the maximum gender composition on a board is 70%, the minimum is 10%. This again, suggests that some of the MFIs have women dominating their boards.

7.4.2   Discussion of Regression Results

Table 7-3: Regression Results (Random Effect Estimation)
Dependent Variable: Return on Assets

Variable	Model 1	Model 2	Model 3
Board size	0.1927	0.1923	0.1761
	(4.23)**	(4.23)**	(3.91)**
Board independence	-0.1921	-0.1887	-0.2643
	(-0.35)	(-0.35)	(-0.48)
CEO duality	-0.1981	-0.2004	-0.1309
	(-1.43)	(-1.45)	(-0.97)
CEO tenure	-0.2681	-0.2711	-0.2151
	(-2.61)**	(-2.65)**	(-2.15)**
Women CEO	0.2958	0.2962	
	(2.08)**	(2.09)**	
Gender Composition of the board	0.0615		0.6346
	(0.35)		(0.36)
Age of MFI	0.0152	0.1484	0.0151
	(1.01)	(0.98)	(1.00)
No of graduate board members	-0.2926	-0.2918	-0.2976
	(-3.62)**	(-3.62)**	(-3.67)**
Log of firm size	0.2637	0.2626	0.2689
	(3.59)**	(3.58)**	(3.65)
constant	-3.2708	-3.2268	-3.2293
	(-3.33)**	(-3.31)**	(-3.27)**
R-squared	0.33	0.2948	0.3167
No. of observations	520	520	520
Test of probability	Wald Chi2(9)=31.02 [0.0003]	Wald Chi2(8)=30.89 [0.0001]	Wald Chi2(8)=26.51 [0.0009]
Hausman Test	Chi2(9)=3.20 [0.9559]	Chi2(8)=1.63 [0.9903]	Chi2(8)=2.97 [0.9362]

Notes: All regressions include a constant. T-statistics are in parenthesis and P-values in square bracket. ** Significant at 5 percent level

Board size is rather positively related to ROA suggesting on the contrary that MFIs should have larger board sizes. The results confirms studies that support the view that larger boards are better for corporate performance because members have a range of expertise to help make better decisions, and are harder for a powerful CEO to dominate. This is in sharp contrast to findings by Jensen (1993), Lipton & Lorsch (1992), Eisenberg et al. (1998), and Sanda et al (2005). The fundamental issue is 'should a board therefore be expanded ad-infinitum'? The answer is obviously NO! To address this is to have an optimal board size

made up of a judicious combination of executive and non-executive members for effective performance of MFIs. However, the issue of optimal board size has come up in other studies but has not really been dealt with thoroughly (Hermalin & Weisbach, 2002).

The independence of the board also shows a negative correlation with profitability of the MFIs. The results suggest that when more non-executive members serve on a MFI board it worsens performance. This also means that an independent board has a negative impact on MFI performance. Once again, this is contrary to findings by other studies such as Brickley and James (1987), Weisbach (1988), Byrd & Hickman (1992), and Brickley et al. (1994). In their studies, they found that the independence of the board enhances firm performance. This is because; it is believed that outside directors are difficult for CEOs to control and their presence promote shareholders' value. It is however important to note that this variable is not significant in explaining MFI performance in this present study.

There have been mixed findings on CEO duality and firm performance. In the present study, the regression results show that when two separate people are entrusted with decision-management and decision-control functions, firm performance is enhanced contrary to the stewardship theory which suggests that the concentration of decision-management and decision-control in the same personality reduces the extent of bureaucracy associated with decision-making and this enhances performance.. The findings conform to earlier studies which suggest that when a CEO doubles as board chairman it leads to leadership facing conflict of interest and agency costs increases. For instance, Fama & Jensen (1983) argue that concentration of decision management and decision control in one individual reduces board's effectiveness in monitoring top management.

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The tenure of the CEO has a negative effect on ROA. Though, some contend that when a CEO serves longer term, it affords the CEO the opportunity to undertake and see through projects deemed profitable to the firm. However, it could be argued that tenure may not necessarily affect profitability if an institution does not have a proactive and pragmatic CEO. Again, the longer the tenure, the greater the possibility of empire building by the CEO making the CEO difficult to control and this negatively affects performance.

The results show that women CEOs enhance performance of microfinance institutions and that board diversity of having more women also improves performance. This is in tandem with recent debates which have highlighted the importance of gender diversity especially in the boardroom (Higgs, 2003; Tyson, 2003). It is advanced that boards could enhance their effectiveness by tapping broader talent pools for their directors and that more diverse board is likely to have better relations with other stakeholders such as customers, suppliers and employees (Ellis and Keys, 2003). It should however be indicated that whiles having women as CEOs significantly enhances performance; the gender composition variable is statistically insignificant.

In conformity with theory, the age of the firm, as a proxy for reputation impact positively on performance likewise the size of a MFI. Expectedly, the size of a MFI has a significant positive impact on performance. This may be due to the fact that a large firm has the ability to accommodate risk and to enhance productivity through diversification of products and services.

Contrary to expectation, the expertise and competence of the board measured by the number of university graduates on such boards has a negative impact on performance. This

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suggests that having more university graduates serve on such boards do not necessarily equip the board to offer the necessary direction, mission and vision in this complex sub-sector within the financial services sector. What is needed could rather be members with a wealth of experience in the operations of these institutions and the sector they operate in.

7.5 Conclusion

This paper examined empirically the relationship between corporate board diversity and the performance of MFIs. The study used a panel data set of fifty-two Microfinance Institutions in Ghana covering the ten year period 1995 – 2004. Performance of the MFIs is measured using Return on Assets (ROA) and board diversity is measured by women CEOs and gender composition of a board.

Though, generally mixed results are found with regard to the broad corporate governance variables, the critical variables of interest showed the expected signs. The study showed that having women CEOs on MFI boards enhances performance and again the more women there are on a board the better the performance.

The findings of this paper have important policy implications for MFIs governance. Giving the important role governance structure plays in the operations of microfinance institutions, the study reaffirms the rather hazy principle that board diversity with women dominance is paramount for enhanced performance of microfinance institutions.

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8   ECONOMIC GROWTH IN AFRICA: THE ROLE OF CORPORATE

GOVERNANCE AND STOCK MARKET DEVELOPMENT$^{\psi}$

8.1   Introduction

The fundamental role of stock markets in the economic growth and development of countries has been debated for years. However, there is the argument that one of the main merits for the development of a stock market is its potential to promote long-term investment and economic growth through raising capital and sharing risks between issuing firms and shareholders. Again, liquid stock markets allow shareholders to dispose of shares quickly and cheaply and in the process enable them to finance otherwise illiquid projects (Levine, 2000). An investment by a firm or the accumulation of physical capital formation has been identified to be closely associated with economic growth (McKinnon, 1973 & Shaw, 1973). Hence stock or equity markets promote economic growth essentially through investment. Though, it is believed that one important role of the stock market is to promote efficient corporate governance, recent scandals involving firms such as the Enron Corp and WorldCom has raised more questions than answers. For instance, what should be the composition of a board of directors? The story of Enron and WorldCom shows clearly that corporate governance would fail to work if the board of directors lack the needed independence and capacity to monitor management due to information asymmetry. The

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development and growth of a stock market in emerging economies has been rampant in recent times especially in Africa. From thirteen stock markets at end of 1992, bourses in Sub-Saharan Africa (SSA) had increased to eighteen in 2002; these markets, with the exception of South Africa, doubled and in some cases more than doubled their capitalisation during the 1992-2002 period (S&P Emerging Markets Handbook). Total market capitalisation for Africa also more than doubled from US $113,423 million to US$ 244,672 million in the same period. For instance, the Ghana Stock Exchange was adjudged the world's best performing market at the end of the first quarter of 2004 with an annual return of 144% in US dollar terms compared to a 30% return by Morgan Stanley Capital International Global Index, 26% Standard & Poor in US and 32% in Europe, amongst others (The Databank Group, 2004). On the continent itself, five other bourses namely Uganda, Kenya, Egypt, Mauritius and Nigeria, besides Ghana, were amongst the best performers in the year. Zimbabwe, however, was the worst performer with an abysmal return of -84%. This is illustrated in figure 8-1.

Figure 8-1: Performance of Some stock Markets Compared to Other World Indicators

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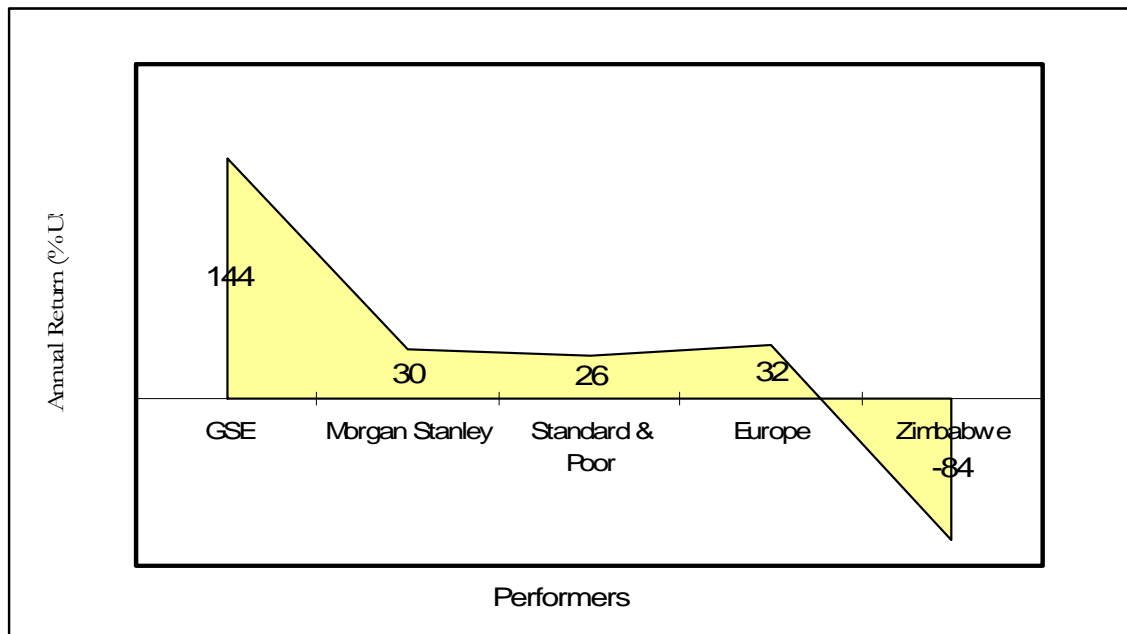
The concept of corporate governance has traditionally been associated with the principal-agent paradigm. The principal-agent relationship arises when there is a separation between ownership and control of firms, according to Berle and Means (1932). In this instance, principals (owners) hire agents (managers) to manage a firm on their behalf for a fee. This arrangement often leads to conflict of objectives as managers may pursue a set of objectives very different from that of owners. In order to reduce such agency costs associated with separation of ownership and control, several mechanisms have been proposed, among them is corporate governance. The term corporate governance has been used in many different ways and the boundaries of the subject vary widely. However, corporate governance could be defined as the set of rules, principles, structures, processes and mechanisms that a firm puts in place to ensure effective accountability of management to several corporate constituencies. The ongoing discussions on corporate governance have highlighted two basic models, namely the shareholder and the stakeholder models. The shareholder model posits that the fundamental objective of the firm is to maximise shareholder wealth through allocative, productive and dynamic efficiency. Thus, a firm's performance is judged by the market value or shareholder's value of the firm. In this case, managers aim constantly to ensure that firms are run in the interests of the shareholders. This has often been regarded as a narrow view of corporate governance warranting the advancement of the second model called the stakeholder model. This takes a broader view of the firm and its constituents. The main argument in this model is that a firm is responsible to a wider constituency of stakeholders other than shareholders. This wider constituency may include contractual partners such as employees, suppliers, customers, creditors, and social constituents such as members of the community within which a firm operates, environmental interests, local and national governments and indeed the society at large.

Corporate governance in Africa is relatively undeveloped. While much could be said of South Africa as having governance structures comparable to the developed market economies, corporate governance in most of the countries on the continent is in a developmental stage. One major characteristic of governance on the continent is the issue of institutional weaknesses and apparent lack of structures to swiftly address corporate disputes. For instance, Ayogu (2001) points out that the quality of corporate governance in Africa may not be independent of the quality of state governance. This is because, he argues that the quality of the state provides the backbone upon which a board of directors can govern and upon which shareholders can "re-direct" the directors or monitor the monitors. Notwithstanding the above, there is overwhelming interest in corporate governance on the continent and this has become the focus of policy discussion and agenda because it is believed that good corporate governance leads to sustainable growth. Like corporate governance, stock markets in Africa are also at various levels of development and efficiency. As mentioned, however, the last three decades has seen an upsurge of stock markets on the continent.

The question concerns whether there is any link between corporate governance, stock market developments and economic growth. This is the fundamental question this paper seeks to explore. The theoretical link between stock market development and growth hinges on the advantage of stock markets spreading and pooling risk. In this light, stock markets influence growth through a number of channels: liquidity, risk diversification, acquisition of information about firms, corporate governance and savings mobilisation (Levine & Zervos, 1996). Levine (1991) used endogenous growth to show that stock markets help protect investors against idiosyncratic risk (firm-specific productivity risks) by providing firms with

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the opportunity to hold diversified portfolios. The rapid development of African bourses is also quite clear. Plausible reasons for these developments lie in the importance of stock markets in economic development. Pardy (1992) has noted that, even in less-developed countries, capital markets are able to mobilise domestic savings and are able to allocate funds more efficiently. Empirical studies on the link between stock markets and growth have varied in methods and results. Atje and Javanovic (1992), using cross-sectional regressions, conclude that stock markets have long run impacts on economic growth. Harris (1997) has also shown, within a cross-sectional framework, that stock markets promote growth, though this occurs only for developed countries. Rousseau and Wachtel (2000) also find that stock markets influence growth via value traded of shares whilst Arestis, Demetriades and Luintel (2001), using time-series on five industrialised countries, indicate that stock markets play a role in growth. Indeed, one other critical role of stock markets is their ability to provide an alternative tool for corporate governance through the use of shareholders' monitoring devices as well as a market for corporate control where raiders can buy up the shares of poorly managed firms, replace the management and make capital gains as seen in the United States and the United Kingdom (Allen & Gale, 2000). The link between the equity market and corporate governance is through the gamut of listing requirements, satisfaction of objective criteria such as equity size, profitability, years of operation and future prospects. Hence, listed firms are supposed to be relatively profitable and large. While the positive relationship between stock market development and economic growth is not at all in dispute, the impact of corporate governance on economic growth is yet to be thoroughly explored, more so on the African continent where such studies are currently non-existent. Some have argued that one important element of improving macroeconomic efficiency is through corporate governance (Maher & Anderson, 1999). Thus, well governed firms are expected to

perform better and this could lead to higher economic growth. By this, therefore, the transmission mechanism through which corporate governance affects economic growth is firm performance.

The rest of the paper is organised as follows: Section two is devoted to data and methodology; Section three discusses empirical findings and section four concludes.

8.2   Data and Methodological Issues

In carrying out this study we use unique data from 103 companies listed on the Ghanaian, Nairobi, Nigerian, Kenyan and South African stock exchanges. Apart from the stock exchange factbooks, some data was also obtained electronically from INET-Bridge. Firms sampled were on the basis of data availability. Sampled firms cover the Industrial, Manufacturing, Mining, Agricultural and Services sectors. In defining what constitutes these sectors, we largely depended on the classifications given by the various stock exchanges. We acknowledge the possibility of non-uniform classification which could pose a problem with regard to the analysis and results, but we are of the opinion that such differences are marginal and thus have little impact on compromising the validity of our results. The finance sector was omitted in conjunction with studies on corporate governance (Faccio & Lasfer, 2000).

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8.2.1 Empirical Model Specification

We carry out our analysis in a dynamic panel data framework with the following model specifications:

$$y_{i,t} = \delta + \lambda y_{i,t-1} + Z'_{i,t}\psi + u_{i,t}, \qquad\qquad 1$$

where $i = 1.............103; t = 1................5,$ and

$y_{i,t}$ is the annual GDP growth rates for country i at time t; $Z'_{i,t}$ is a vector of explanatory variables of stock market development and firms' governance indicators, and control variables; and

$$u_{i,t} = \mu_i + v_{i,t} \qquad\qquad 2$$

Our main stock market development variables are the ratio of market capitalisation to GDP measuring size, and the ratio of value trading to GDP as a measure of liquidity, size and transaction cost. We use the size of the board (measured by the number of directors) and the independence of the board (measured by the ratio of non-executive directors to total board size) as the main governance variables. The duality of the CEO (a dummy variable equal to 1 when the same person occupies CEO and Board chair positions, and to 0, otherwise), CEO tenure, and the size of the economy measured by the standardised GDP in dollar terms are used as control variables. The specified model has two main characteristics. An

autocorrelation problem due to the presence of the lagged dependent variable among the regressors and individual effects characterising heterogeneity among the interactive variables. Thus, in carrying out our estimation we employ the Arellano and Bond estimator which uses additional instruments and utilises the othogonality conditions that exist between lagged values of $y_{i,t}$ and the disturbances $v_{i,t}$ (Arellano & Bond, 1991). In this regard the study adopts the Arellano and Bond (1991) Generalized Method of Moments (GMM) dynamic instrumental variable modelling approach where the lagged values of the dependent variable (growth) and differences of the independent variables are suitably used as a valid instrument to control for this bias. The use of instruments is important because, in a dynamic panel, the lagged dependent variable $[y_{it} - y_{it-1}]$ will be correlated with the lagged error terms $[e_{it} - e_{it-1}]$ by construct and induce the possibility of endogeneity of some explanatory variables. Based on the assumption of no serial correlation in the error terms and weak exogeneity of explanatory variables, the following moments condition applies:

$$E[y_{it-1}(e_{it} - e_{it-1})] = 0 \quad y \geq 2 \tag{3}$$

$$E[z_{it-1}(e_{it} - e_{it-1})] = 0 \quad y \geq 2 \ , \tag{4}$$

where z_{it} is a set of explanatory variables. Arellano and Bond's (1991) GMM estimation is based on these moment conditions and is consistent if lagged values of explanatory variables are valid instruments. The validity of the use of instruments is checked via the utilisation of a Sargan test of over-identifying restrictions which tests for correlation between the instruments and the model residuals.

8.3   Empirical Findings

8.3.1   Descriptive Statistics

Table 8-1: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Minimum	Maximum
Board size	388	9.224227	3.409779	3	23
Board independence	388	0.4190222	0.259989	0.05	0.846
CEO duality	388	0.193299	0.3953953	0	1
CEO tenure	388	3.510309	1.585593	2	8
Board meetings	388	10.53093	2.149833	5	14
Size of audit	388	4.146907	1.188474	2	9
Audit committee meetings	388	4.71134	1.49907	2	12
Profitability (ROA)	388	0.1268295	0.1458879	-0.426	0.68
GDP Growth	388	0.0258657	0.147148	-0.0023688	0.0470028
Mkt. Capitalisation	388	1224.69	74642.71	209.7413	231289
Mkt. Cap to GDP	388	0.2943687	0.4461504	0.0564919	1.503618
Value Traded to GDP	388	0.0807902	0.190179	0.0020291	0.6349773

The firms that were investigated operate with a mean board size of about nine members, with a minimum and maximum board size of three and twenty-three members respectively. Most of these boards are deemed to be relatively less independent because about 42% of them are composed of non-executive directors, which implies that about 58% of such boards are composed of executive directors or insiders (John & Senbet, 1998). With a mean percentage point of 19, most of the firms have two individuals occupying the positions of CEO and board chairperson. The situation suggests the presence of less conflict of interest and fewer agency problems. These CEOs have been operating with a mean tenure of about four years, with a range between two and eight years, and these boards have a mean of about eleven meetings annually with the minimum and maximum being five and fourteen meetings per year respectively. Having audit committees in place, these committees average four meetings per year, though some meet twelve times a year. The mean of four meetings could be due to the fact that the audit committees review financial and operational issues on a

quarterly basis. Though most of the firms show steady performance with regard to profitability, some of them also did not appear to perform well during the period under study. Stock markets in these economies have also experienced some degree of growth with regard to size, liquidity and cost of transaction.

Table 8-2: Pair-wise Correlation Matrix

	Board Size	Board Independence	CEO duality	CEO tenure	Ratio of Market Capitalization to GDP	Ratio of Value traded to GDP	ROA	GDP Growth Rate
Board size	1.0000							
Board Independence	0.1277	1.0000						
CEO duality	-0.1108	-0.2426*	1.0000					
CEO tenure	0.3607*	-0.0130	0.2132*	1.0000				
Ratio of Mkt. Cap. To GDP	0.6124*	0.2655*	-0.2000*	0.5144*	1.0000			
Ratio of Value Traded to GDP	0.5998*	0.2624*	-0.1961*	0.4941*	0.9758*	1.0000		
ROA	0.2527*	0.2433*	-0.1324	0.0089	0.1363	0.1412	1.0000	
GDP Growth Rate	0.0653	0.2620*	0.1349	0.1551	-0.0044	0.0090	0.2152*	1.0000

Note: * indicates significance at 1% level.

The pair-wise correlation matrix in Table 8-2 shows that both the size of the board and its independence have positive relationship with firm performance. Again, the independence of the board has a positive impact on economic growth through firm performance. The results also show that stock market indicators could influence each other towards growth and development. For instance, the liquidity and the size of the market are positively correlated

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shown by the high correlation coefficient of 0.9758 at 1% level of significance. It is clear from the table that all the corporate governance indicators showed the expected signs both with stock market variables and economic growth. For instance, the size of the board has a positive relationship with both market size, liquidity and transaction cost likewise the independence of the board. A combination of board chair and CEO positions by the same person negatively affects stock market activities ostensibly through a rise in agency costs. The CEO tenure also has positive impact on both stock market development variables likewise firm profitability. The implication being that longer tenure enables CEO to enhance firm value and this eventually translates into market developments through size and liquidity.

8.3.2   Discussion of Regression Results

Table 8-3: Regression Results

Regressors	Dependent variable: GDP Growth Rate	
	Model 1	Model 2
Lagged GDP	0.3395796	0.8453405
	(14.38)**	(35.71)**
Board size	-0.0000493	-6.08e-06
	(-1.40)	(-0.10)
Board independence	0.002097	
	(3.17)**	
CEO duality	0.0005314	
	(1.99)**	
Capitalisation ratio	0.1493188	
	(15.66)**	
Value traded to GDP	-0.2568253	0.01026
	(-13.24)**	(5.38)**
Size of the economy	-0.0027471	
	(-21.49)**	
Constant	-0.000097	-0.0000196
	(-10.14)**	(-1.41)
Obs	347	347
	Wald Chi2(7)=8492.93	Chi2(3)=2104.73

Note: All regressions include a constant. T-statistics are in parenthesis and probability values in square brackets. ** indicates significance at 5% level.

Arellano-Bond test that average autocovariance in residuals of order 1 is 0: H0: no autocorrelation   z = -7.80 Pr > z = 0.0000. Arellano-Bond test that average autocovariance in residuals of order 2 is 0: H0: no autocorrelation   z = -0.21   Pr > z = 0.8314.

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A regression analysis and the interaction between the dependent and the independent variables is also carried out and the results are shown in Table 8-3[8]. The results clearly reaffirm the notion that countries that grow have the potential to grow, in that previous growth rate reinforces current capacity to grow as lagged GDP growth rate is significantly and positively related to GDP growth. The capitalisation ratio (ratio of market capitalisation to GDP) and total value of share traded to the GDP ratio (measuring size, transaction cost and, more importantly, liquidity) are the main stock market development indicators. The results show that the ratio of market capitalisation to GDP has a positive relationship with GDP and economic growth, augmenting growth. In model 1, the surprise is the negative relationship between market liquidity and economic growth. The results presuppose that an increase in stock market activities through higher liquidity has negative implications for economic growth. However, the correlation matrix in Table 8-3 suggest that there is a high correlation between ratio of market capitalization and market liquidity (with coefficient of 0.9758) and thus using the two variables in the same regression could be problematic. This could partly explain the sign of market liquidity to GDP growth in model 1. In Model 2 however, higher liquidity is seen to augment GDP growth. The implication of the results of the two models is that an increase in stock market activities should be well-directed and focussed and that too many policies could erode the effect of critical indicators. The results also show that the independence of a corporate board enhances firm performance and therefore promotes economic growth. This is consistent with other studies such as Fama (1980) who suggested that outside directors may act as "professional referees" to ensure that competition among insiders stimulates actions consistent with shareholder value

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[8] All models passed the diagnostic testing of validity of instruments via Sargan Test and second order serially correlated errors via AR tests. Results are not shown for brevity.

maximisation and thus firm performance. Again, a number of empirical studies on outside directors support the beneficial monitoring and advisory functions to firm shareholders (see Brickley & James, 1987; Weisbach, 1988; Byrd & Hickman, 1992; Brickley *et al.*, 1994). Baysinger and Butler (1985) and Rosenstein and Wyatt (1990) showed that the market rewards firms for appointing outside directors. Brickley *et al.* (1994) found a positive relation between the proportion of outside directors and stock-market reactions to poison pill adoptions. In addition, the size of a corporate board is seen to have a negative correlation with performance and therefore with economic growth, though it is not significant.

While all the control variables relatively showed the expected signs, the size of the economy showed a surprise result, pointing to a negative relationship between the size of an economy and growth. While this at first sight sounds surprising, it could be true, empirically re-iterating the fact that growth may not necessarily be dependent on size if resources are not effectively harnessed and channelled, and combined with appropriate policies within a conducive environment.

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Table 8-4: Country Specific Effects (South Africa as Reference)
Dependent Variable: GPD Growth Rate (Random Effect Estimation)

Regressors	
Board Independence	0.0021712
	(0.97)
Ratio of Value Traded to GDP	0.0450028
	(6.23)**
Ghana	0.0417801
	(10.41)**
Nigeria	0.0297743
	(7.57)**
Kenya	0.0070739
	(1.76)**
Constant	-0.0000965
	(-0.02)
R-squared	0.9377
Number of Observations	388
Test of Probability	Wald Chi2(5)=1769.55
	$[0.0000]$

Note: The regression includes a constant. ** indicates 5% significance level. T-statistics are in parenthesis and probability values in square bracket.

The regression results for country specific effects shown in Table 8-4 indicate that the performance in the growth variable is largely driven by Ghana, followed by Nigeria and Kenya in that order. The implication is that the economic growth pattern of these countries within the period under study was influenced by the nature and direction of economic growth in Ghana. Surprisingly, all the countries in the sample namely Ghana, Nigeria and Kenya appear to have performed better than South Africa within the period.

8.4   Conclusion

The study examined how corporate governance and stock market developments impact on economic growth. While most boards were seen to be less independent, the regression results point to a positive relationship between corporate governance particularly

independent boards and economic growth. Again, while stock market development has positive implications for economic growth, the study shows that policies should be well-focussed and well-directed in order to promote economic development. Our recommendation is that corporate boards should be made as independent as possible and that stock market activities should be studied carefully in order to design an appropriate policy mix for the desired effect of enhancing economic growth and development to be realised.

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CHAPTER NINE

9 SUMMARY, CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS

FOR FUTURE RESEARCH

9.1 Summary

In spite of the recognition that good corporate governance is important for enhanced corporate performance and sustained macroeconomic stability, the subject area is highly understudied especially in Africa. In trying to fill this gap this study investigated 103 listed companies drawn from Ghana, Nigeria, Kenya and South Africa and 52 Microfinance Institutions from Ghana. Data consisted basically of governance and financial variables and analysis was done primarily within the Panel Data Framework in which various shades of panel data estimations were carried out. The first chapter introduced the study by highlighting the research gap, research objectives, significance of the study, the organisation of the study and the limitations within which the study was carried out.

The dissertation presented the results of research work underlying seven stand-alone but related essays focussing on the relationship between corporate governance and various aspects of firm performance. Whilst, five of the essays dwelt on corporate governance and firm specific attributes, one considered determinants of board size and its composition by using Ghanaian data, and the last paper explored how corporate governance mechanisms particularly board independence and stock market development affect economic growth. The first essay looks at corporate governance and firm performance and the second

focussed on the determinants of board size and its composition. The third essay examined how corporate governance affects shareholder value maximisation using dividend yield and by arguing that well-performing firms may not necessarily make shareholders better off. In an attempt to look at the role of corporate governance in the determination of debt or equity as a source of finance, the fourth essay considered how corporate governance affects the financing choices of firms by using data from Kenya. The link between a firm's investment opportunity set and corporate governance is the subject matter of the fifth essay. While, the sixth essay looks at how corporate board diversity through gender affects the performance of microfinance institutions in Ghana, the last and seventh essay is devoted to an exploration of a possible linkage between corporate governance, stock market developments and economic growth with emphasis on board independence as the main governance variable.

9.2   Conclusion

Findings of the study show that the direction and the extent of impact of corporate governance on firms are dependent on the performance measure being examined. Large and independent corporate boards are seen to enhance corporate performance irrespective of performance being market or accounting based. While, the CEO duality does not significantly impact on the market-based performance measure of Tobin's q, it has a negative relation with firm profitability in tandem with other studies.

Interestingly, a CEO's tenure in office is seen to enhance a firm's profitability but has a negative effect on shareholders' value maximisation. Results also reveal that board activity

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intensity has a negative effect on profitability consistent with other studies. Furthermore, the study shows that the size of audit committees and the frequency of their meetings have a positive influence on Tobin's q (a market-based performance measure), but seem to have no relationship with a firm's profitability. Likewise, it is seen that institutional shareholding essentially sends a positive signal to potential investors and that enhances market valuation as against accounting-based performance measures.

The study also showed that both sector and country specific effects impact on shareholder value maximisation and that shareholders wealth is influenced by country specific risk. The mining sector is seen as dominant in the payment of a higher dividend per share.

Findings of the study confirmed that the size and composition of a corporate board is a function of firm and sectoral characteristics. Specifically, the study found a positive relationship between firm level risk and board size. On the other hand, it found that firms with longer CEO tenure and reputation employ smaller board sizes. Again, the findings of the study contradict other findings that suggest that the longer the CEO tenure, the fewer the number of outside directors appointed; firms with heavy institutional shareholding also use fewer outside directors. Furthermore, banks are seen to employ smaller boards and fewer outside directors, probably as a result of the existence of other regulatory mechanisms for ensuring good governance in such institutions.

The study also indicated that firms with larger boards employ more debt irrespective of maturity period, rather than equity, to raise corporate value. Again, results show that while the independence of the board has a positive relationship with both long-term and total

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leverage, it is negatively and significantly correlated with short-term debt and also when a CEO doubles as board chair-person, less debt is employed. Results furthermore, showed that firms with investment or growth opportunities employ large boards (high board and auditor fees), have longer CEO tenure and are profitable. In addition, our findings show that country and sector specific effects influence a firm's response to existing governance structures and that impact on firm growth as well. While firms in South Africa exhibit relatively higher growth rates, findings of the study suggest that governance structures in Ghana may be better than those of Nigeria and Kenya, and firms in the mining sector appear to dominate with regards to growth opportunities. Furthermore, findings of the study are consistent with recent thinking and discussions which point to the fact that governance reforms have been geared towards the importance of gender diversity especially in the board room, thereby enhancing the board's effectiveness and improving performance.

Finally, findings indicate that corporate governance particularly board independence has a positive impact on economic growth through firm performance. Again, while stock market development has positive implications for economic growth, findings of the study suggest that there should be a judicious mix of policies and programmes which should be well-focussed and well-directed in order to promote economic growth and development simply because too many policies could have the potential of eroding the effect of critical indicators.

9.3 Recommendations

It is evident that corporate governance has an influence on a firm's performance. Indeed, while some of our findings are revealing, clear policy implications should not be lost. For enhanced performance of corporate entities, it is important to separate the positions of CEO and board chair and also to maintain and operate with relatively independent boards and audit committees. It is our recommendation, in tandem with others, for instance the King Report, that corporate entities should make more use of external directors so as to ensure board independence, promote shareholder value by enhancing firm performance and also send a positive signal to potential investors.

Perhaps one main policy recommendation that arises out of our findings is the ability to strike a good balance between quality and quantity with regards to board sizes. Since larger boards discourage investors especially debtholders, it is our recommendation that quality should not be sacrificed for quantity with regard to board appointments. A case in point is that of South Africa. For instance, the pursuance of the Black Economic Empowerment (BEE) Policy should be applied with a great sense of caution because it has implications for firm performance and repercussions for potential investment. Probably, what is needed in this case is the establishment of structures that aim at building a breed of potential and promising young people with the requisite training, know-how and skills for future positions.

The findings of this paper have important policy implications for microfinance institutions governance. Giving the important role of the governance structure in the operations of microfinance institutions, the study reaffirms the rather hazy principle that board diversity

with women in dominance is paramount for enhanced performance of microfinance institutions..

9.4   Suggestions for future Research

As already indicated, it would have been ideal to have had a large data set and probably from a lot more countries. The selection of corporate governance variables though consistent with several studies was primarily as a result of data limitations. In the future, we would want to take a broader look at corporate governance indicators for a thorough understanding of corporate governance matters on the continent. In spite of the acknowledged limitations of this study, conclusions based on the findings of the study are not compromised and that the study has to a large extent contributed to our understanding of corporate governance on the continent.

APPENDIX

QUESTIONNAIRE

A PhD student is carrying out a Dissertation on Corporate Governance and Firm Performance in Africa at the University of Stellenbosch Graduate School of Business. This questionnaire therefore is soliciting for the under listed data. You are assured that the data collected is for academic purposes only and will be treated with the strictest confidentiality.

COMPANY BACKGROUND

Country…………………………………………………………………………………...

Sector…………………………………………………………………………………..

Year of Incorporation………………………………………………………………….

GOVERNANCE DATA

Board Characteristics

What is the size of the board?...

How many are Non-executive directors?………………………………………………….

How frequent does the board meets on yearly basis (start from 1995-2004)?………………..

Does the CEO serve as the board chair?..

How long does a CEO serve?..

Audit Committee Characteristics

What is the size of the audit committee?..

How many are employees?...

How many are affiliates of the Company?...

How many times does the audit committee meet on yearly basis (start from 1995 -2004)?.......